WM-EX2/EX2HG/EX2HGX

SERVICE MANUAL

AEP Mode
UKMode
WM-EX2H
E Mode
WM-EX2/EX2HG
Tourist Mode
WM-EX

Photo : WM-EX2

Model Name Using Similar Mechanism	WM-EX1HG
Tape Transport Mechanism Type	MT-WMEX2-112

SPECIFICATIONS

Tape section

Frequency response (Dolby NR* off)
Playback: 30–18,000 Hz
Output
Headphones (REMOTE∩ jack)
Load impedance 8–300 ohms
Power output
5 mW + 5 mW (16 ohms)
* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ⒹⒹ are trademarks of Dolby Laboratories Licensing Corporation.

General

Power requirements
1.5 V
Rechargeable battery
One R6 (size AA) battery
DimensionsR6 (w/h/d)
Approx. 80.8 x 111.3 x 20.8 mm, incl. projecting parts and controls
Mass
EX2: Approx. 150 g
EX2HG/EX2HGX: Approx. 160 g
Incl. rechargeable battery, headphones with remote control and cassette;
EX2: Approx. 245 g
EX2HG/EX2HGX: Approx. 250 g

Supplied accessories
Battery case (1)
Stereo headphones with remote control (1)
Ear adaptors (2)
Battery charger (1)
Rechargeable battery (1)
AC plug adaptor (1) (E, Tourist model)
Carrying pouch (1)
Cleaning cloth (1) (EX2HG/EX2HGX only): Supplied in the carrying pouch.

Design and specifications subject to change without notice.

House Current

Remove the rechargeable battery if inserted and attach the battery case and connect the AC power adaptor (AC-E15HG not supplied) to the DC IN 1.5 V of the battery case and to the wall outlet. Do not use any other AC power adaptor.

Polarity of the plug

— Continued on next page —

MICROFILM

CASSETTE PLAYER

SONY

Preparing a Power Source

Choose one of the three power sources below; dry battery, rechargeable battery, and house current.

Dry Battery

1 Attach the supplied battery case.

2 Open the battery compartment lid, and insert an R6 (size AA) dry battery (not supplied) by matching the + and – on the battery to the diagram inside the battery compartment.

When to replace the battery

Replace the battery with a new one when the BATT lamp goes off and "⌧" in the display of remote control flashes.

Display	Condition
RECH	The battery power is weak when lit.
	The battery is exhausted when flashing. Replace with a new battery.

Battery life (Approx. hours)

	Sony alkaline LR6(WM)	Sony alkaline LR6(SG)	Sony R6P (SR)
Tape playback	36	30	10

For maximum performance we recommend that you use an alkaline battery.

Note

• Do not charge a dry battery.

Rechargeable Battery

For the European models

1 Insert the supplied rechargeable battery (NC-6WM) into the charger with correct polarity.

2 Plug in the charger to the mains.
UK model: Full charging takes about 3.5 hours.
European Continent model: Full charging takes about 2.5 hours.

3 Insert the fully charged battery into the rechargeable battery compartment.

When to charge the battery

Charge the battery when the BATT lamp goes off and "⌧" in the display of remote control flashes. You can charge the battery about 300 times.

Battery life (Approx. hours)

	Rechargeable battery (NC-6WM)
Tape playback	9 43 (with Sony alkaline LR6 (WM))

For other models

1 Insert the supplied rechargeable battery (NH-9WM(S)) into the charger with correct polarity.

2 Plug in the charger to the mains.

Full-charging takes about 100 minutes (charger lamp goes off).
If the plug does not fit your mains, attach the supplied AC plug adaptor.

3 Insert the fully charged battery into the rechageable battery compartment.

Battery life (Approx.hours)

	Rechargeable battery (NH-9WM(S))
Tape playback	16 50 (with Sony alkaline LR6(WM))

Notes

• Do not tear off the film on the rechargeable battery.
• Use the Sony NH-9WM(S) (not applicable for the European models) or NC-6WM rechargeable battery only with the supplied battery charger.

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Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

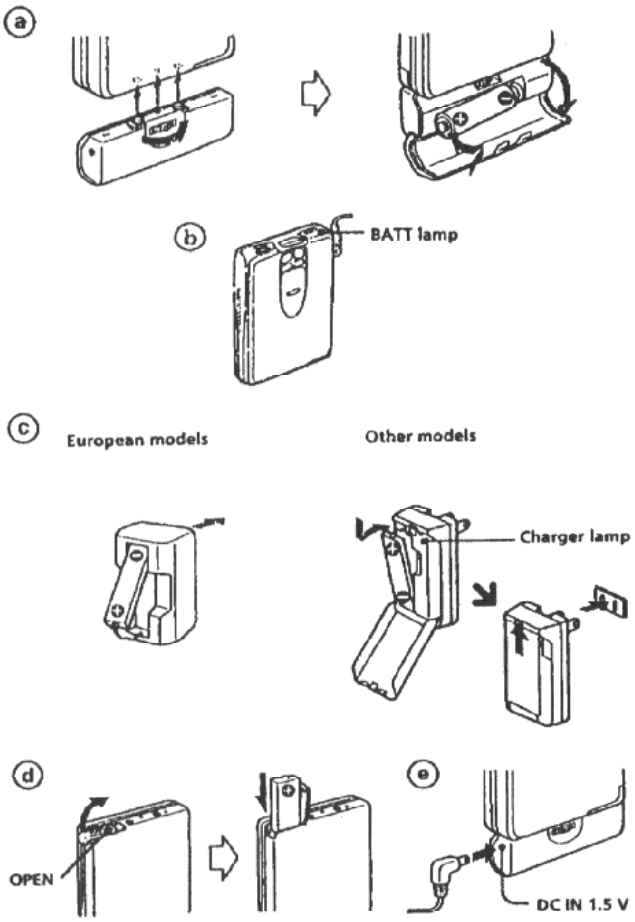
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

This section is extracted from instruction manual.

A



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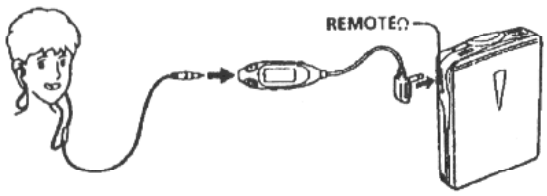

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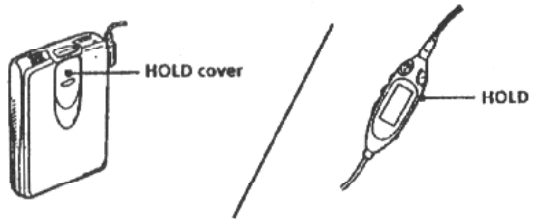

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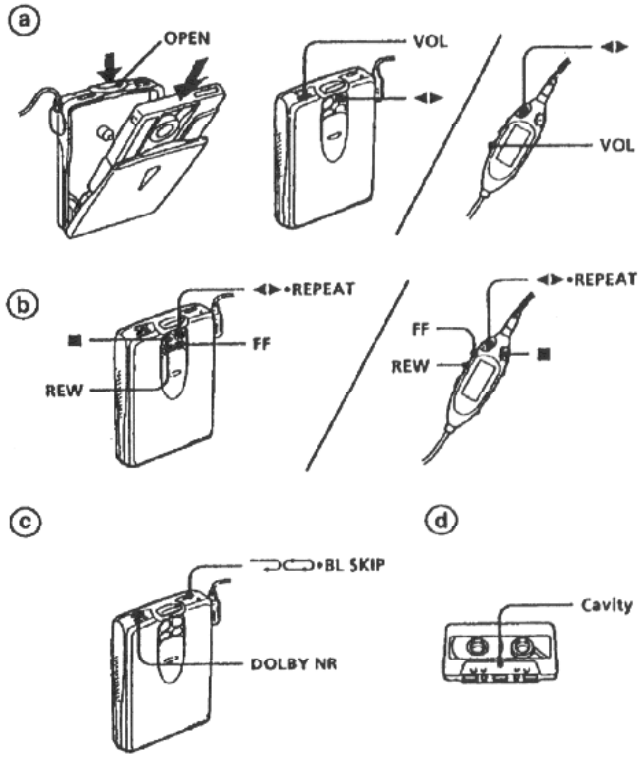
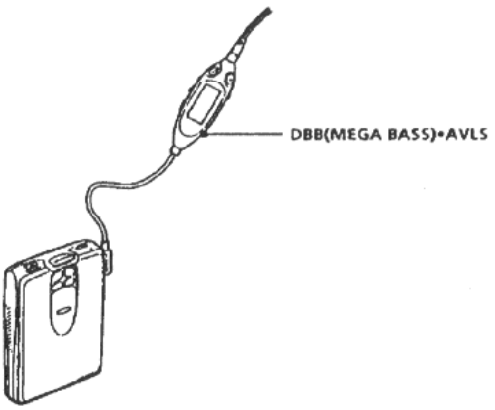


E



SECTION 2
SERVICE NOTE

[Service Mode]

Mode which enables the mechanism to be operated with the AUDIO board opened.

1. Setting

1) Refer to "Disassembly" and remove the cabinet and open the AUDIO board.
2) Connect the AUDIO board to the motor and plunger using a jumper wire. Use "Extension tool (1-769-143-11)) (one set 10 tools)" to make connection simple.
3) Short-circuit the service mode land (TP701) by soldering.
4) Remove R726 on the AUDIO board.
5) Short-circuit S704 with the jumper wire.
6) Turn OFF the BL SKIP switch (S702) of the Mode Switch flexible board (MODE).
7) Supply 1.3V to the battery terminals (+) and (–) using a stabilized power supply.

2. Preset State

This state must be set to set the PLAY, FF, and REW modes.

1) Check that the lever (NR SW) is at the center and N/R switch (S701) is at the center. If not, set the preset state as follows.
2) Move the N/R switch (S701) according to the side faced by the lever (NR SW).
3) Turn OFF the stabilized power supply switch once and then turn it ON again so that the lever (NR SW) can be moved. Move the N/R switch (S701) according to this timing and set to the center.

3. FF REW Mode

1) Check the "2. Preset State" and press the FF switch and REW switch.

4. PLAY Mode

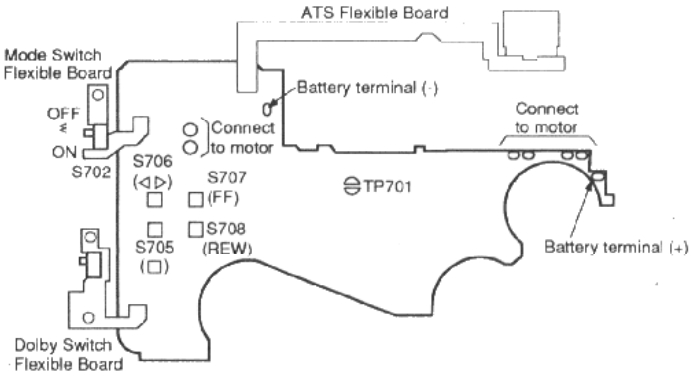
1) Check the "2. Preset State".
2) Press the ◁▷ switch. The lever (NR SW) will move to the N side once and then to the R side. Move the N/R switch (S701) according to this timing to set the PLAY (R side) mode. Press the ◁▷ switch another time and move the N/R switch (S701) according to the movement of the lever (NR SW) to the PLAY (N side) mode.

Note 1 : If the above cannot be performed, start again from preset.

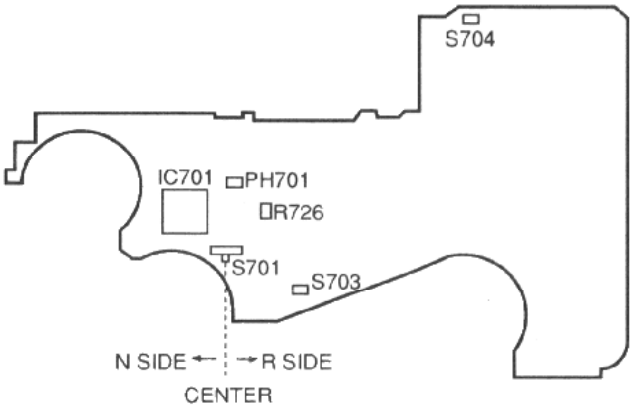
Note 2 : Use the remote control ◁▷, □, FF, and REW switches as much as possible. If the remote control is not available, do not touch S705 to S708 with the hand and use something with a round tip to press them.

Note 3 : By using a headphone, the timing for moving S701 can be known by the beep.

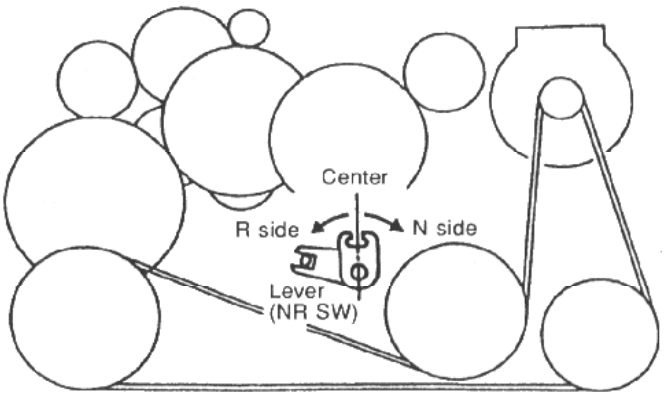
[AUDIO BOARD] (SIDE A)



[AUDIO BOARD] (SIDE B)

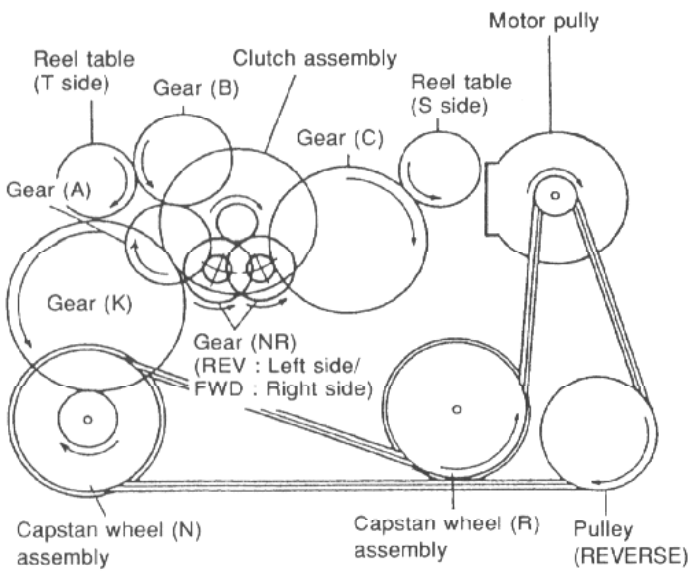


[Lever (NR SW)]

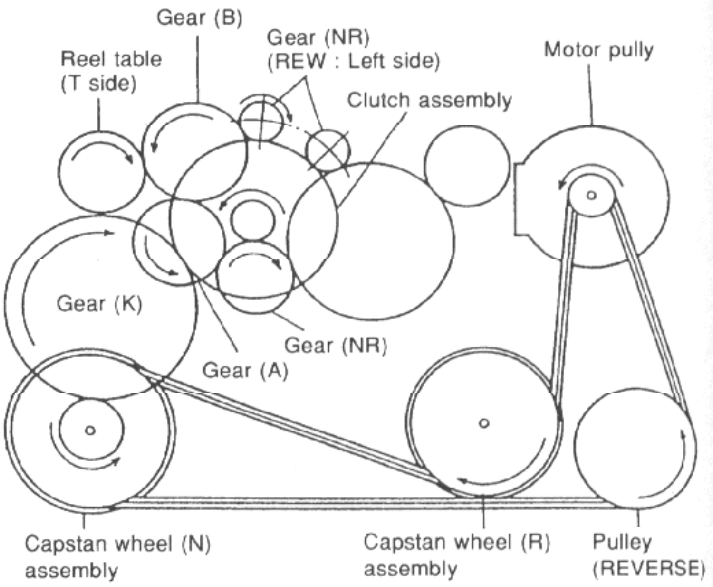


[Rotation system]

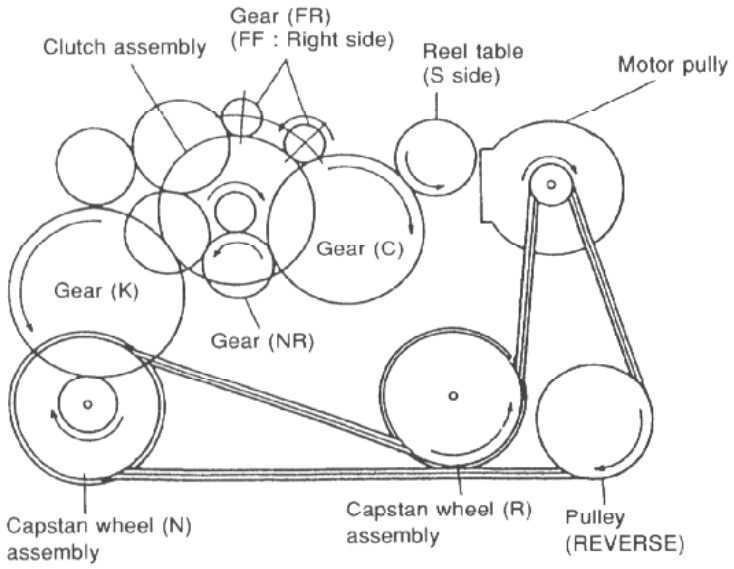
Rotation system during PLAY.



Rotation system during REW.



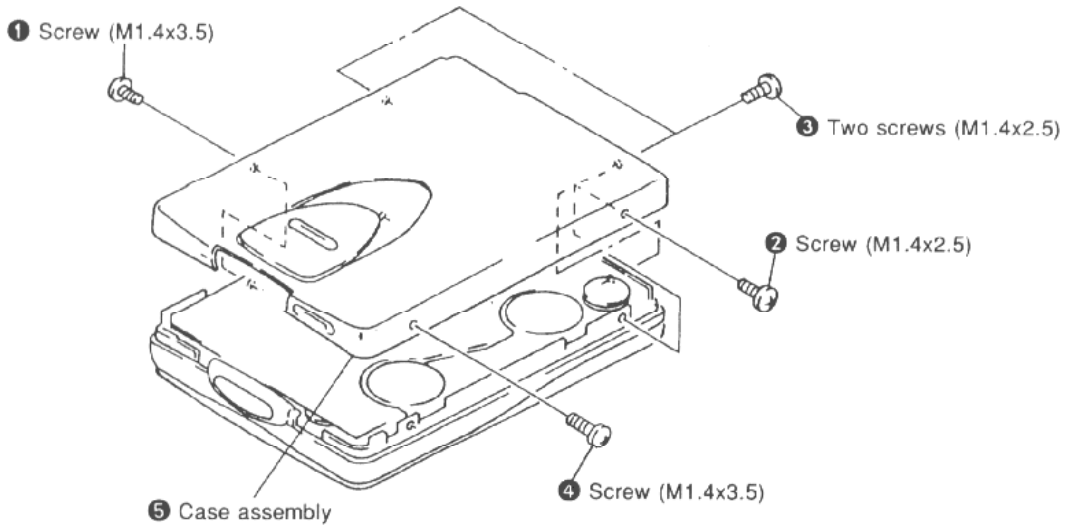
Rotation system during FF.



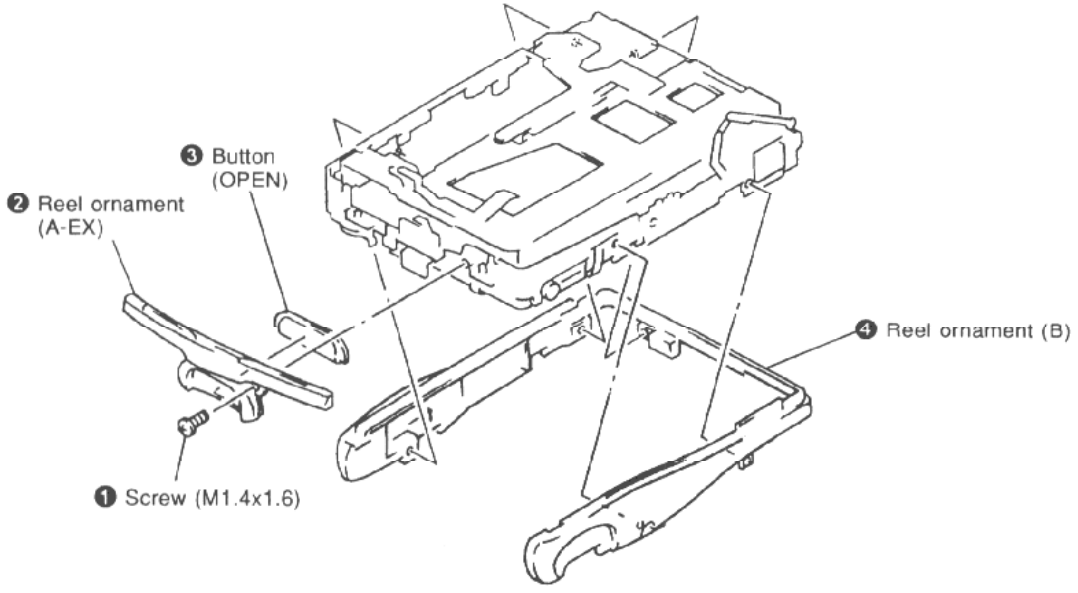
SECTION 3
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

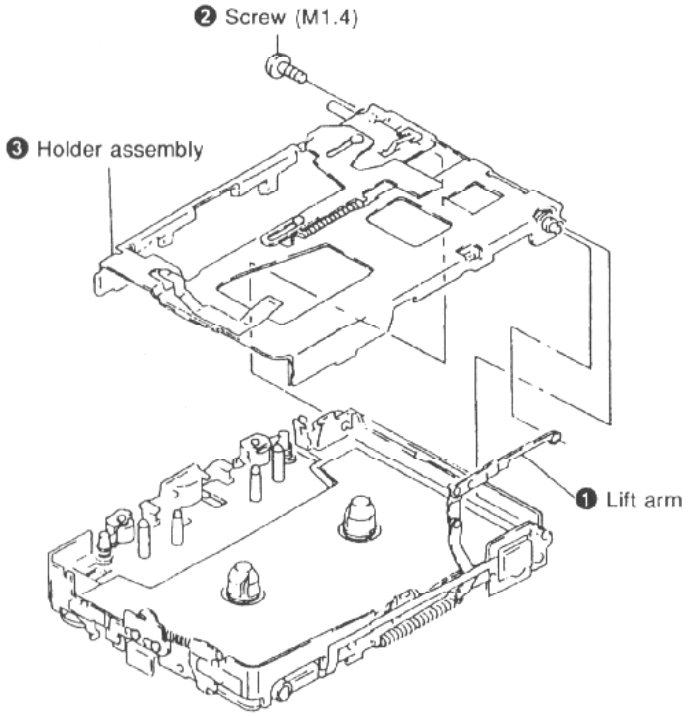
3-1. CASE ASSEMBLY



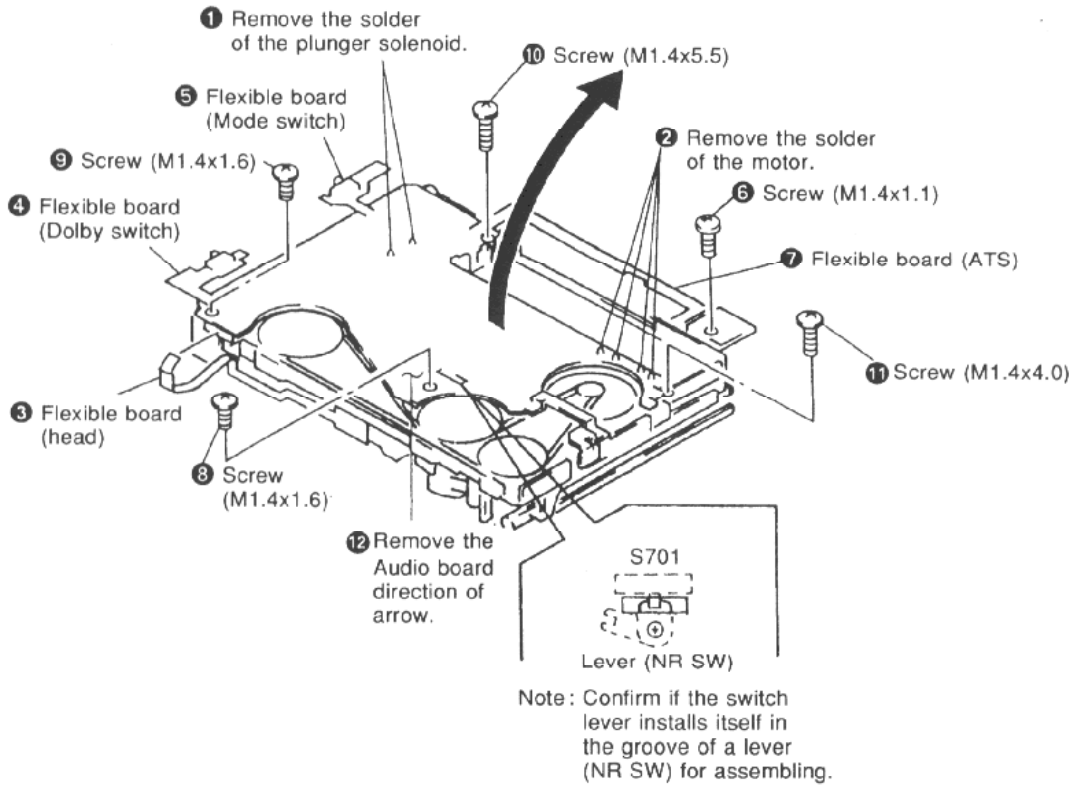
3-2. REEL ORNAMENT



3-3. HOLDER ASSEMBLY



3-4. AUDIO BOARD


❶ Remove the solder of the plunger solenoid.
❿ Screw (M1.4x5.5)
❺ Flexible board (Mode switch)
❾ Screw (M1.4x1.6)
❷ Remove the solder of the motor.
❹ Flexible board (Dolby switch)
❻ Screw (M1.4x1.1)
❼ Flexible board (ATS)
⓫ Screw (M1.4x4.0)
❸ Flexible board (head)
❽ Screw (M1.4x1.6)
⓬ Remove the Audio board direction of arrow.
S701
Lever (NR SW)

Note: Confirm if the switch lever installs itself in the groove of a lever (NR SW) for assembling.

SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Before adjusting, clean the following parts with a piece of cotton moistened with alcohol.
   playback head pinch roller
   rubber belt capstan
2. Demagnetize the playback head using a head demagnetizer.
3. Do not use a magnetized screwdriver for adjustments.
4. After adjusting, apply screw-locking compound onto the adjusted parts.
5. Unless specified otherwise, use a specified voltage (1.3V) to perform the adjustments.

[Torque Measurement]

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	18 — 28 g • cm
FWD Back tension		0.5 — 3.0 g • cm
REV	CQ-102RC	18 — 28 g • cm
REV Back tension		0.5 — 3 g • cm
FF	CQ-201B	More than 40 g • cm
REW		

SECTION 5.
ELECTRICAL ADJUSTMENTS

PRECAUTION

1. Specified voltage : 1.3V.
2. Switch position
   DOLBY NR switch : OFF
   DBB switch : NORM (Only remote control)

Cassette Section

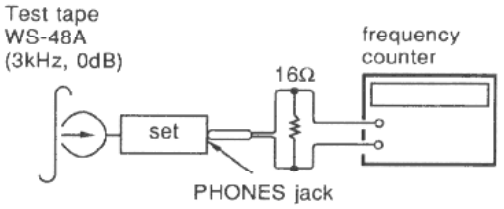
Test tape

Product name	Recorded contents	Purpose
WS-48A	3 kHz, 0 dB	Tape speed

0dB = 0.775V

[Tape speed adjustment]

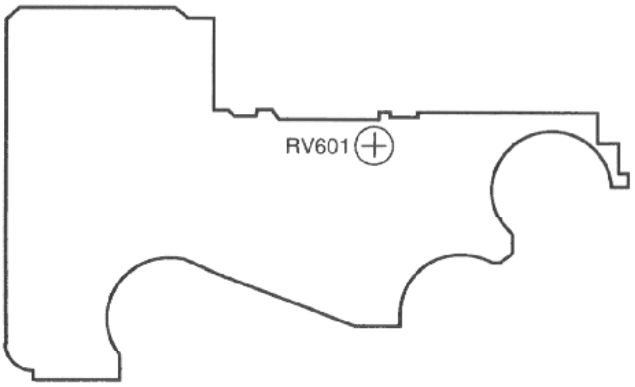
Procedure :



1. Playback WS-48A (tape center part) in the FWD state and adjust RV601 so that the frequency counter reading becomes 3000 ± 10 Hz.
2. Playback WS-48A (tape center) in the REV state.
   Check that the frequency counter reading is within 2.5% of the reading of step 1.

Adjustment Point :

[AUDIO BOARD] (SIDE A)

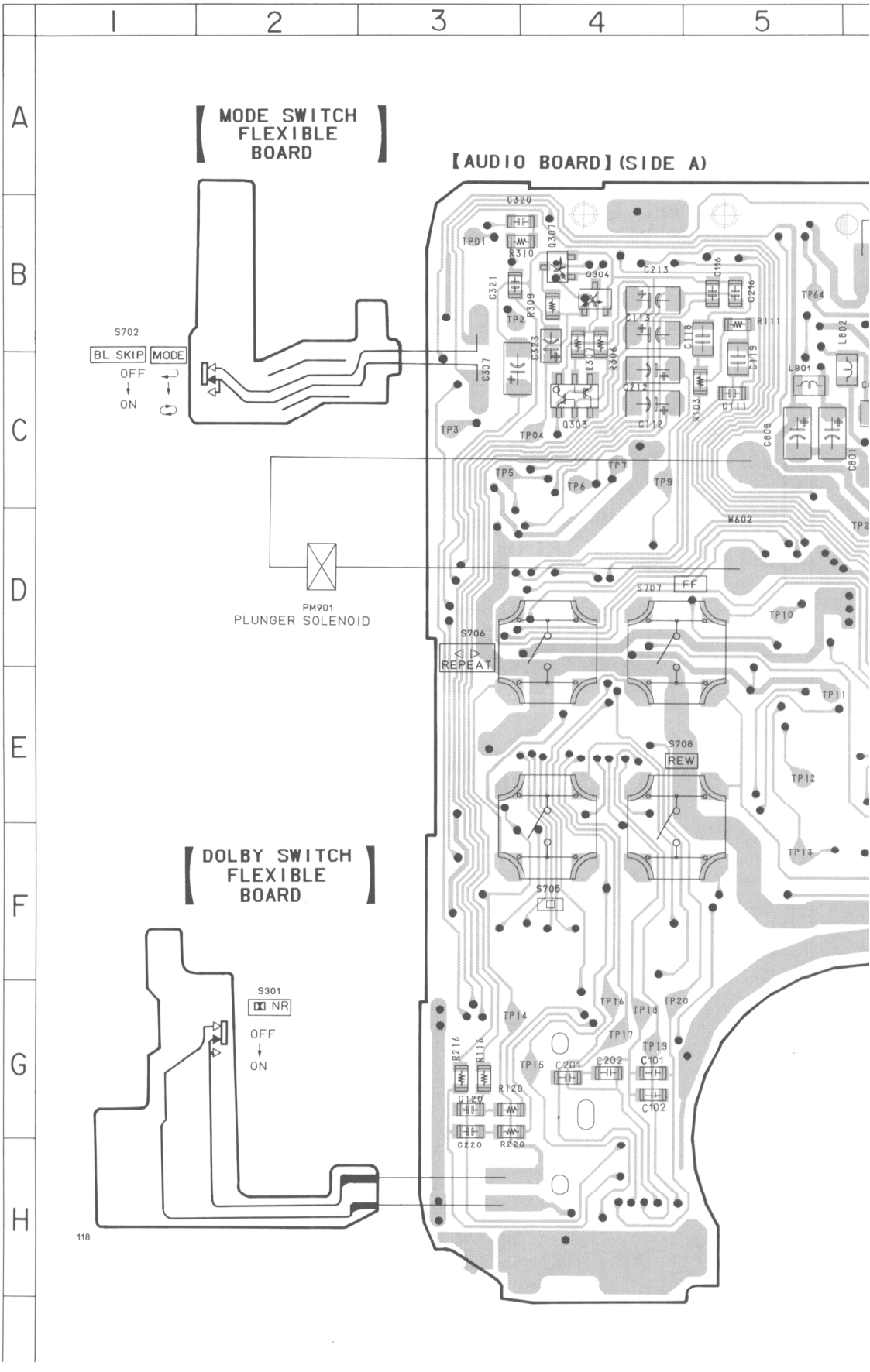


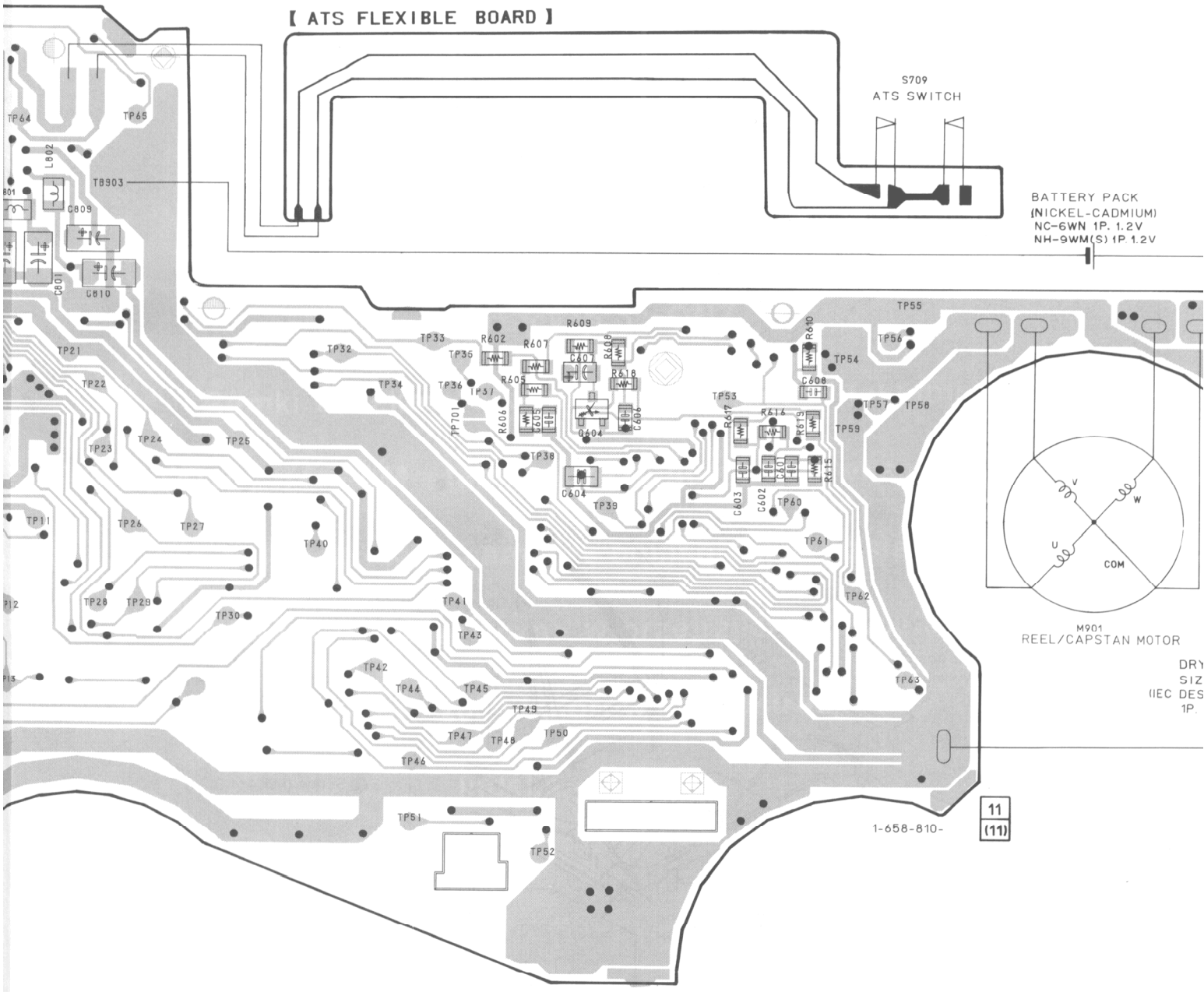
SECTION 6
DIAGRAMS

6-1. PRINTED WIRING BOARD

- **Semiconductor Location**

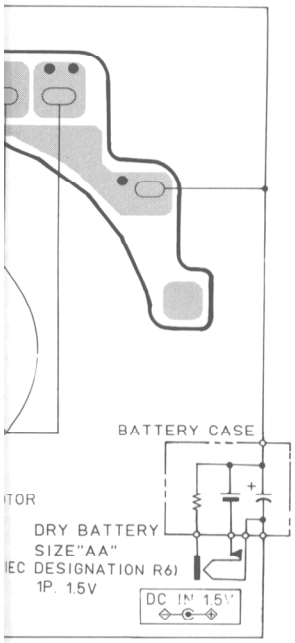
Ref. No.	Location
D601	C-25
D602	D-21
IC301	D-24
IC601	D-18
IC701	E-18
IC702	F-17
IC703	E-21
IC705	F-20
IC706	D-21
IC801	C-22
Q301	E-25
Q302	G-23
Q303	C-4
Q304	B-4
Q305	F-21
Q306	F-23
Q307	B-4
Q601	D-21
Q602	D-17
Q604	D-9
Q701	E-22
Q702	D-22
Q705	G-25
Q706	F-19

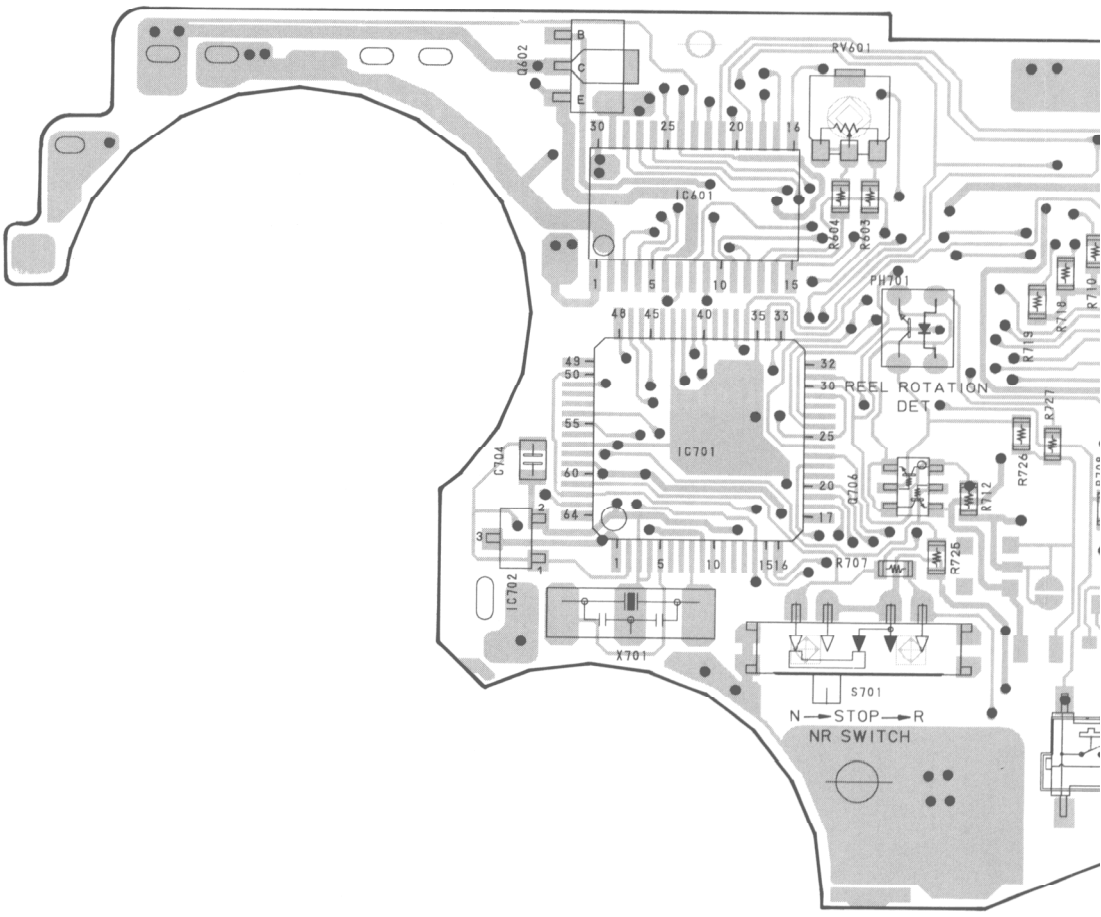




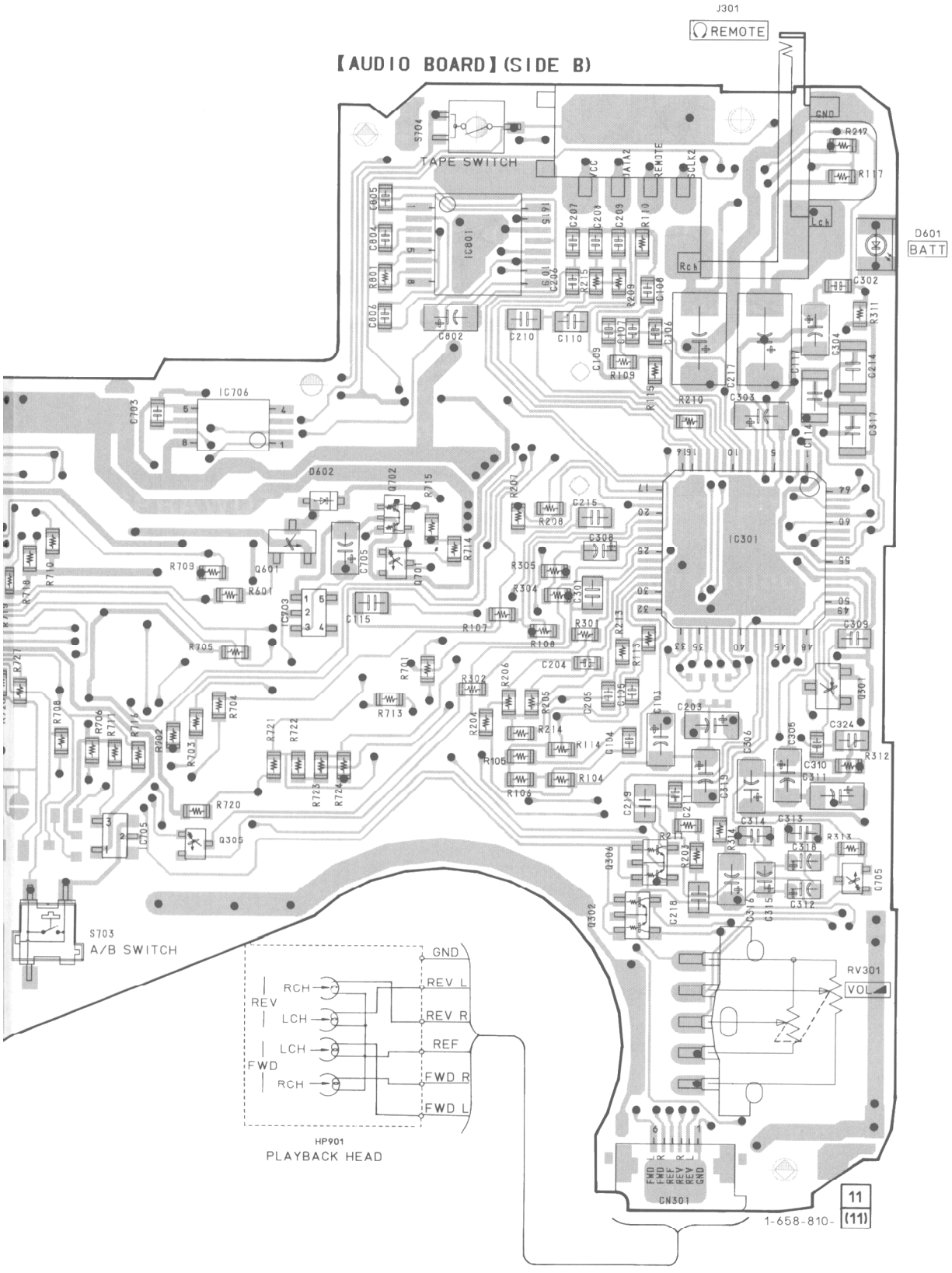
Note:

- ● : Through hole.
- ▭ : Pattern from the side which enable seeing.
  (The other layer's patterns are not indicated.)


BATTERY CASE
DRY BATTERY
SIZE"AA"
DESIGNATION R6)
1P. 1.5V
DC IN 1.5V


Q602
B
C
E
RV601
IC401
R604
R603
PH701
R710
R719
REEL ROTATION
DET
IC701
C704
Q706
R712
R726
R727
R707
IC702
X701
S701
N→STOP→R
NR SWITCH

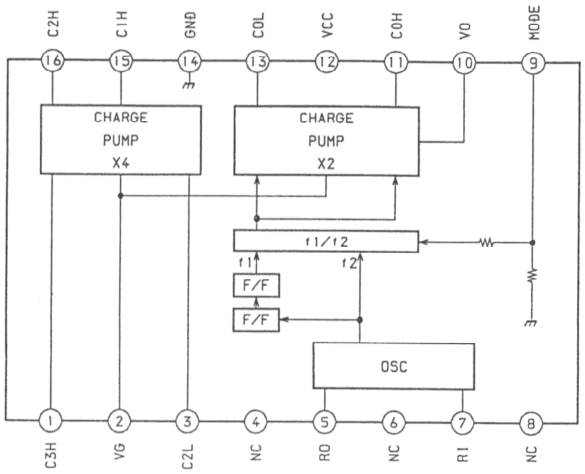
	20	21	22	23	24	25



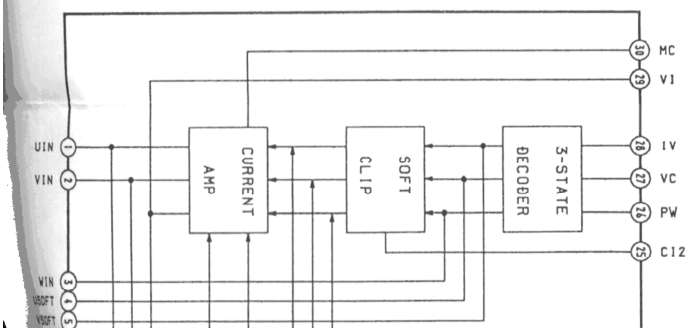
6-2. SCHEMATIC DIAGRAM

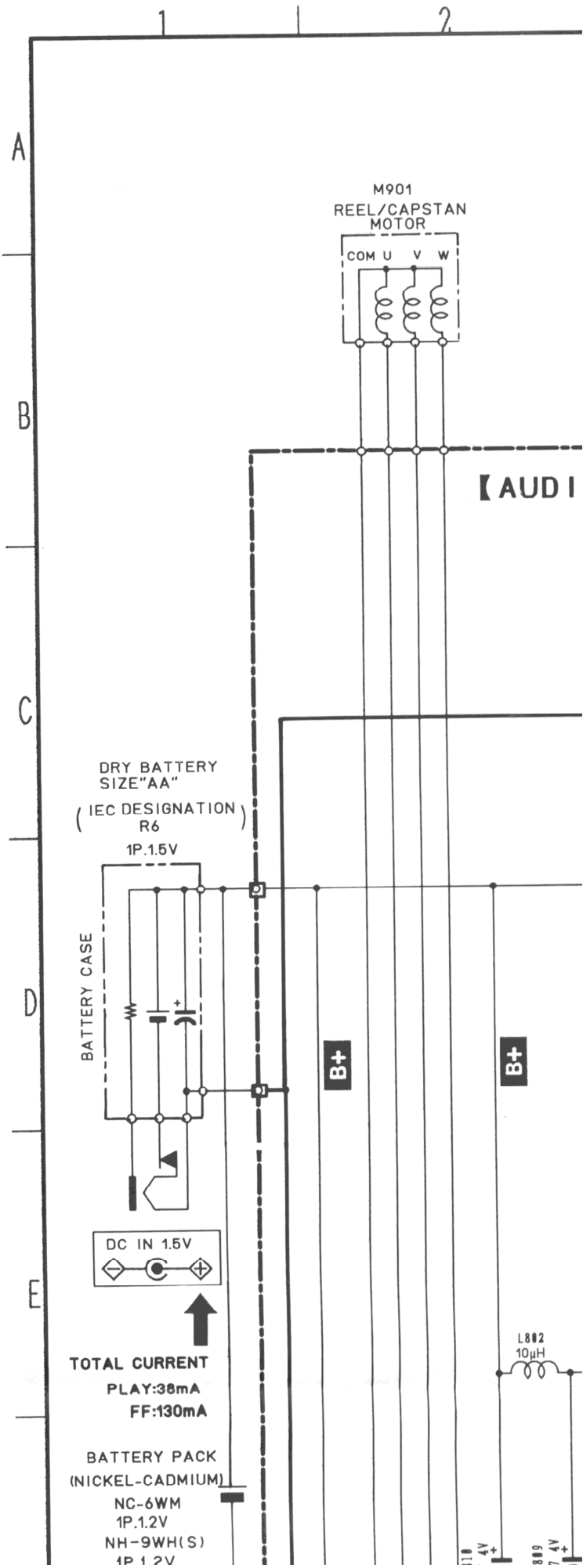
• See page 19 for IC Pin Functions. (IC601, 701)

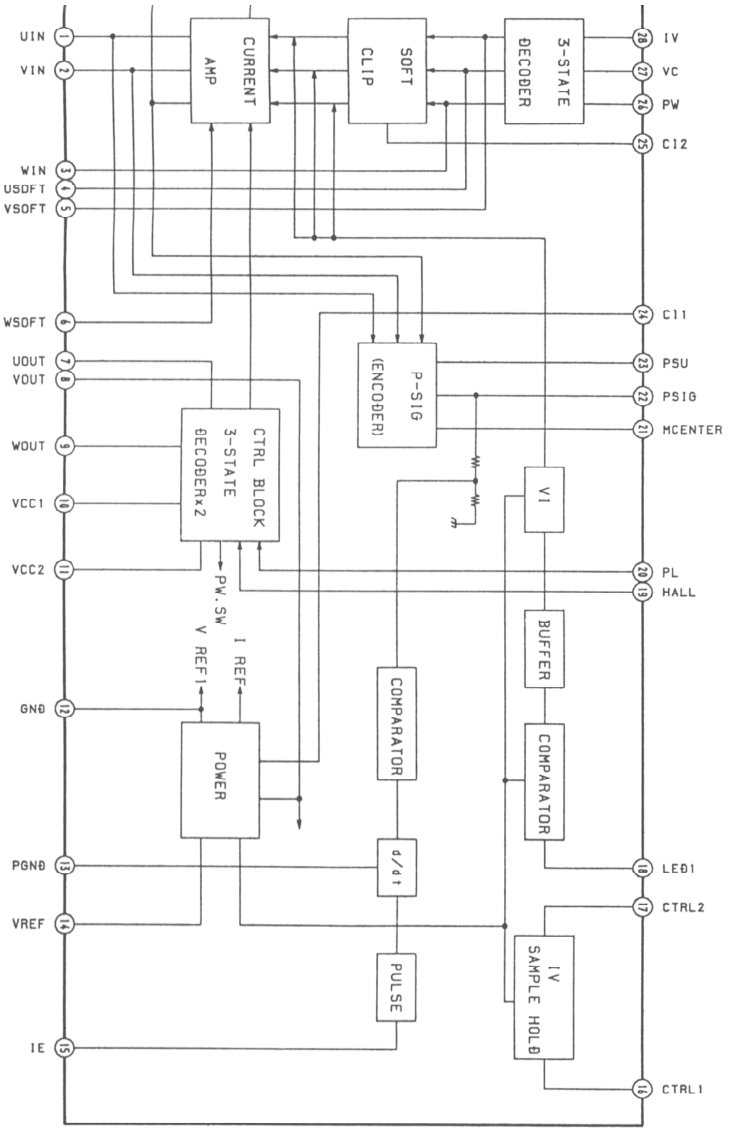
IC801 MPC1850S VMEL



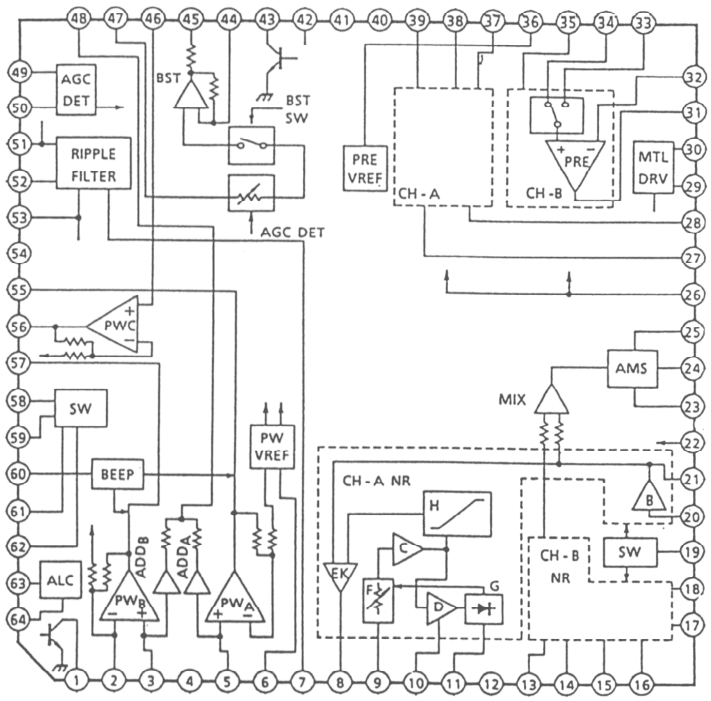
IC601 LB1679V

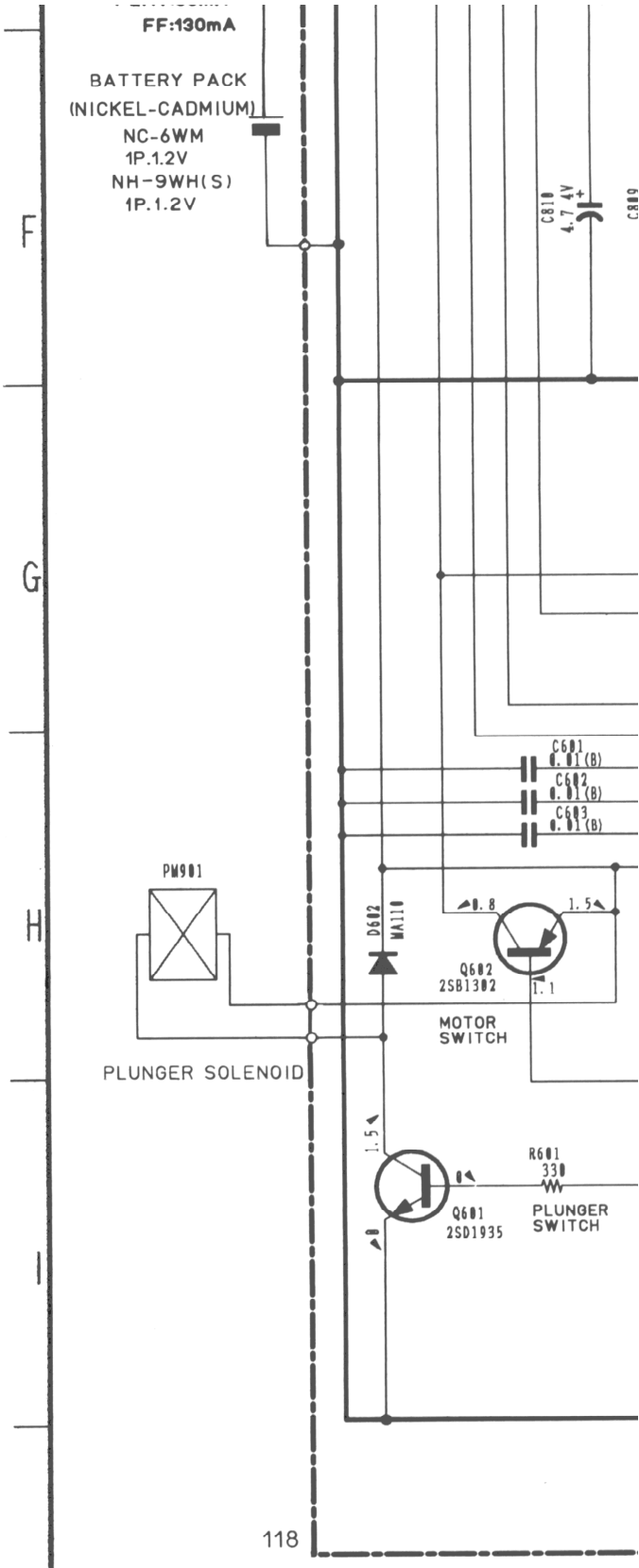






IC301 TA2072F





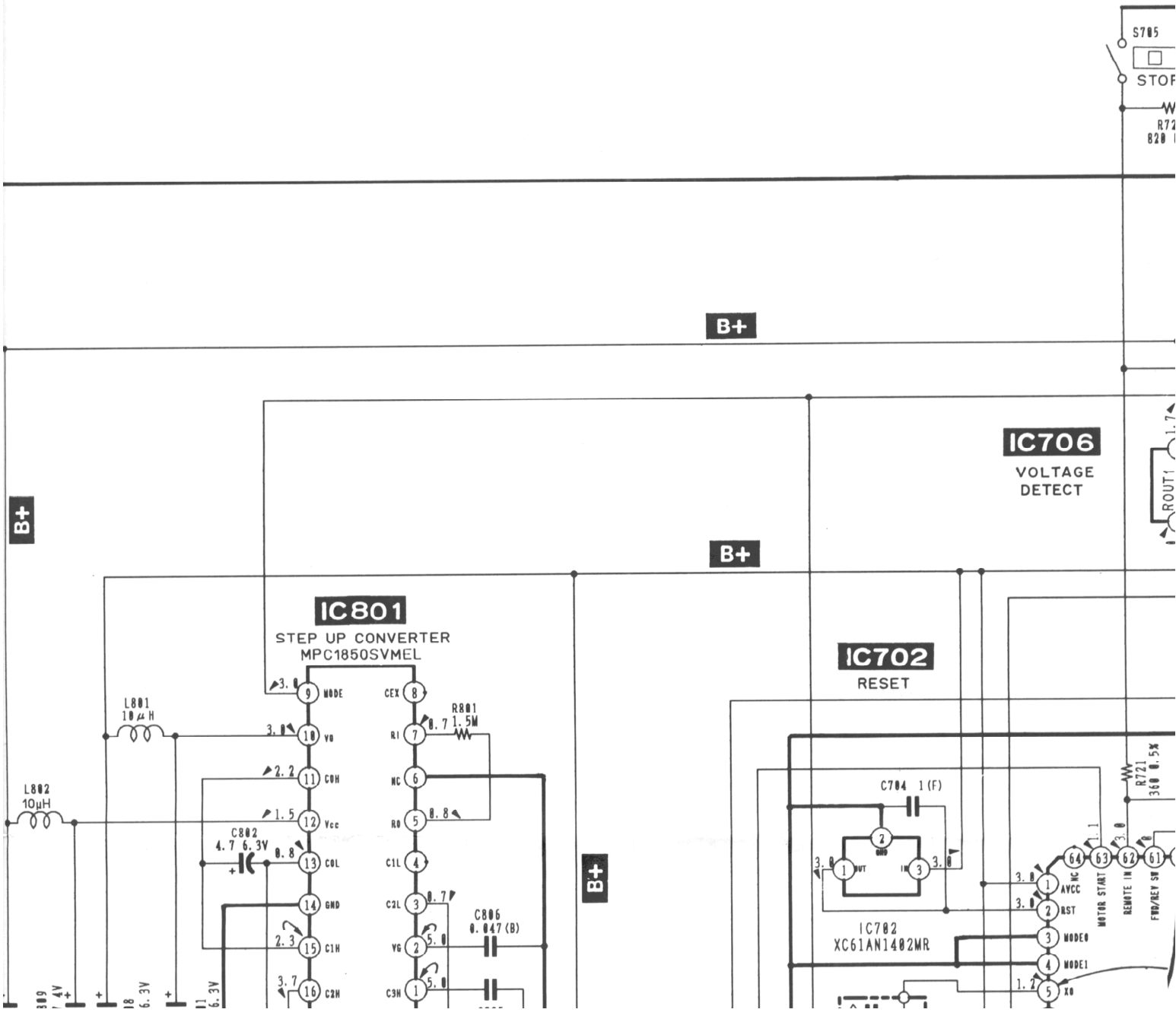
Note:

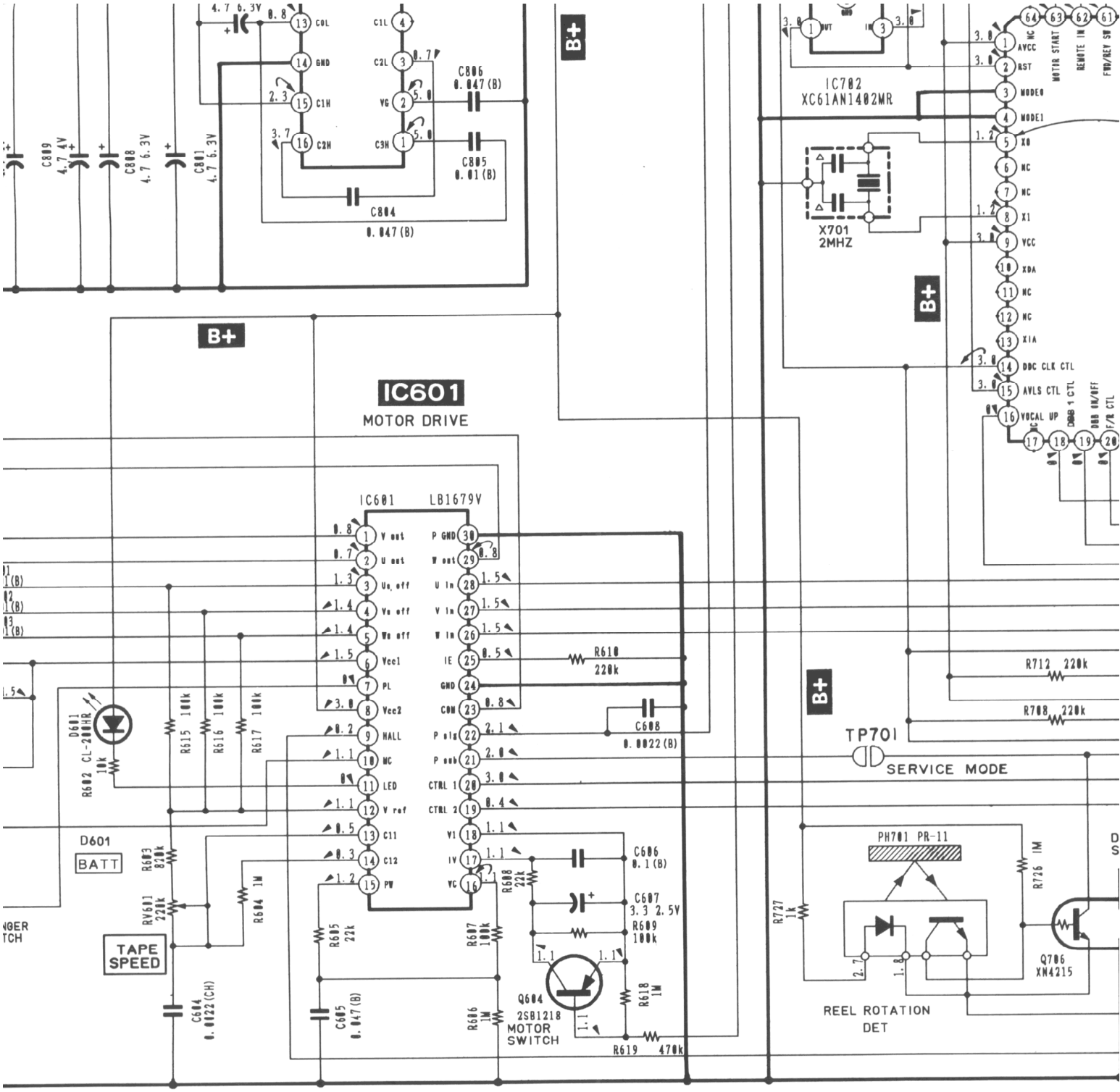
- All capacitors are in μF unless otherwise no
  50WV or less are not indicated except for elec
  tantalums.
- All resistors are in Ω and 1/4W or less unles
  specified.
- % : indicates tolerance.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line
- ▭ : adjustment for repair.

01)

3 4 5 6

【AUDIO BOARD】

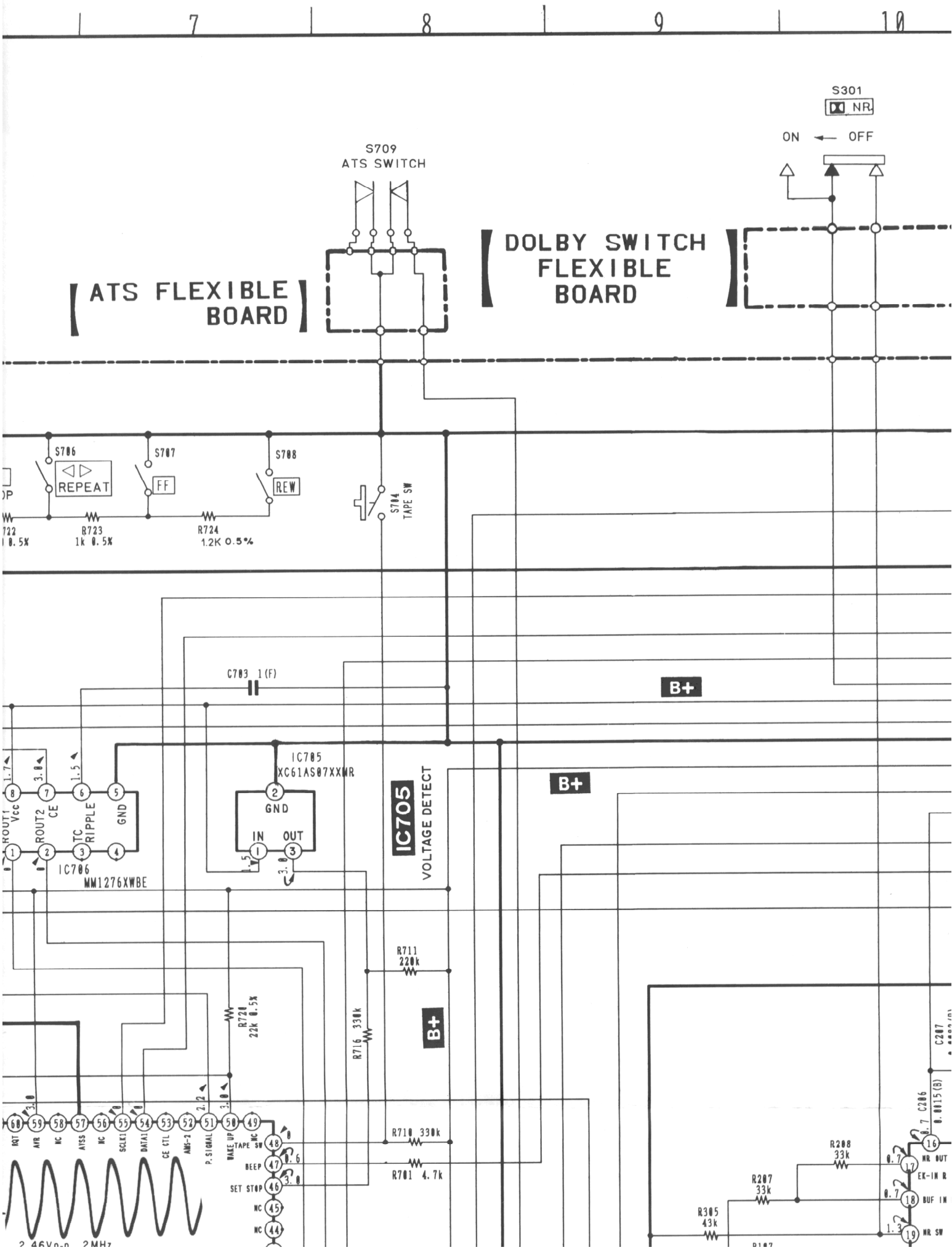


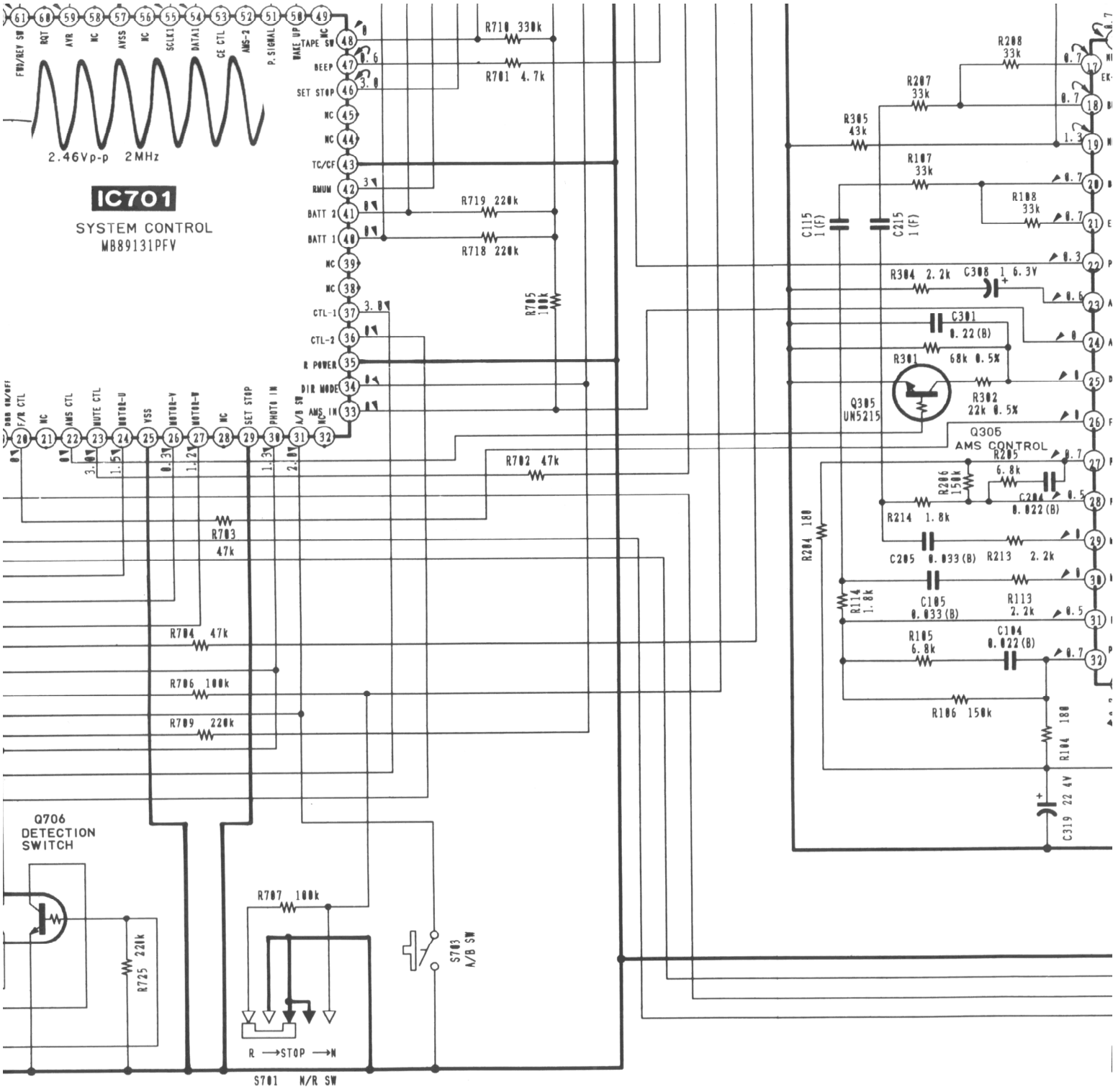


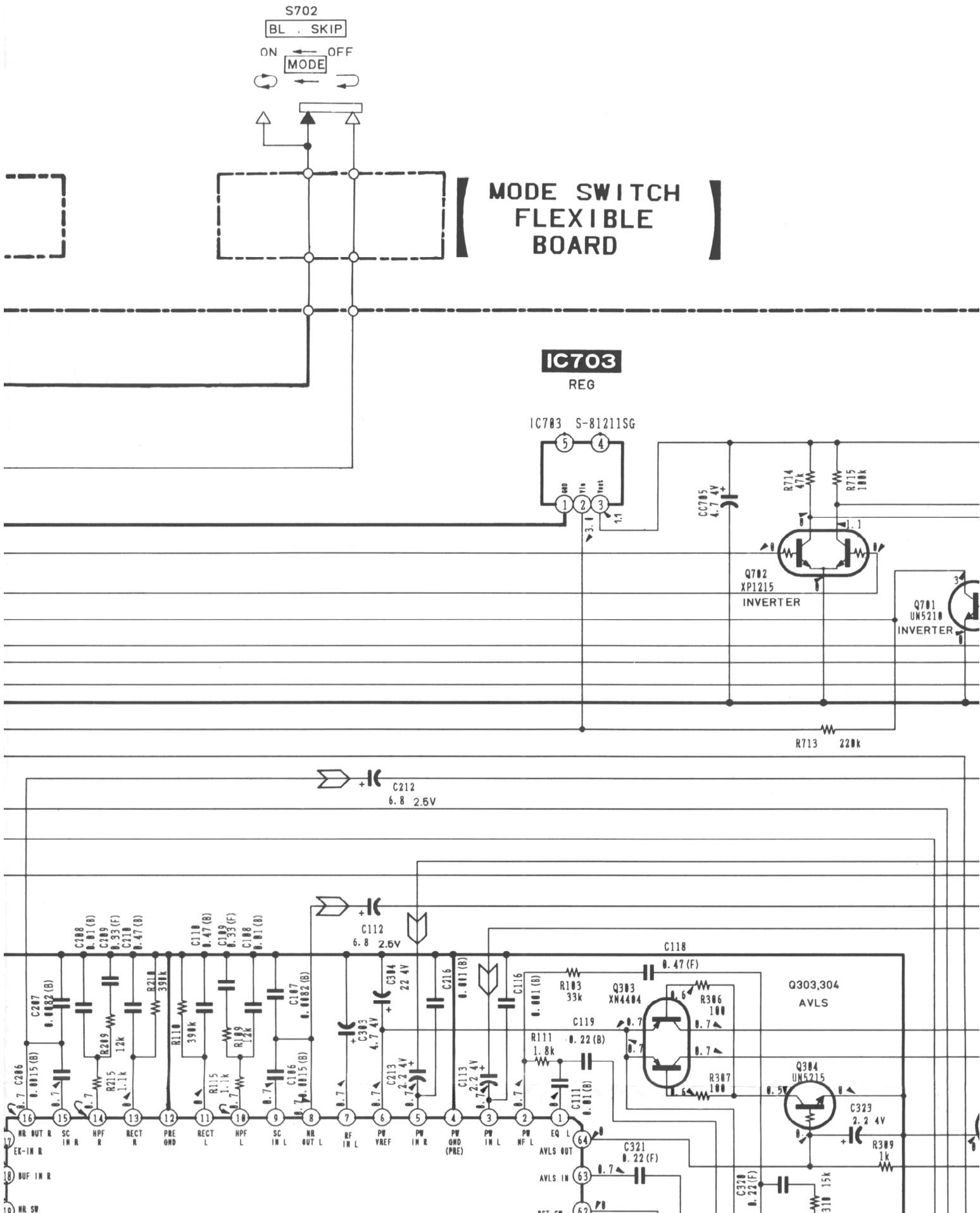
wise noted. pF:µµF
: for electrolytics and

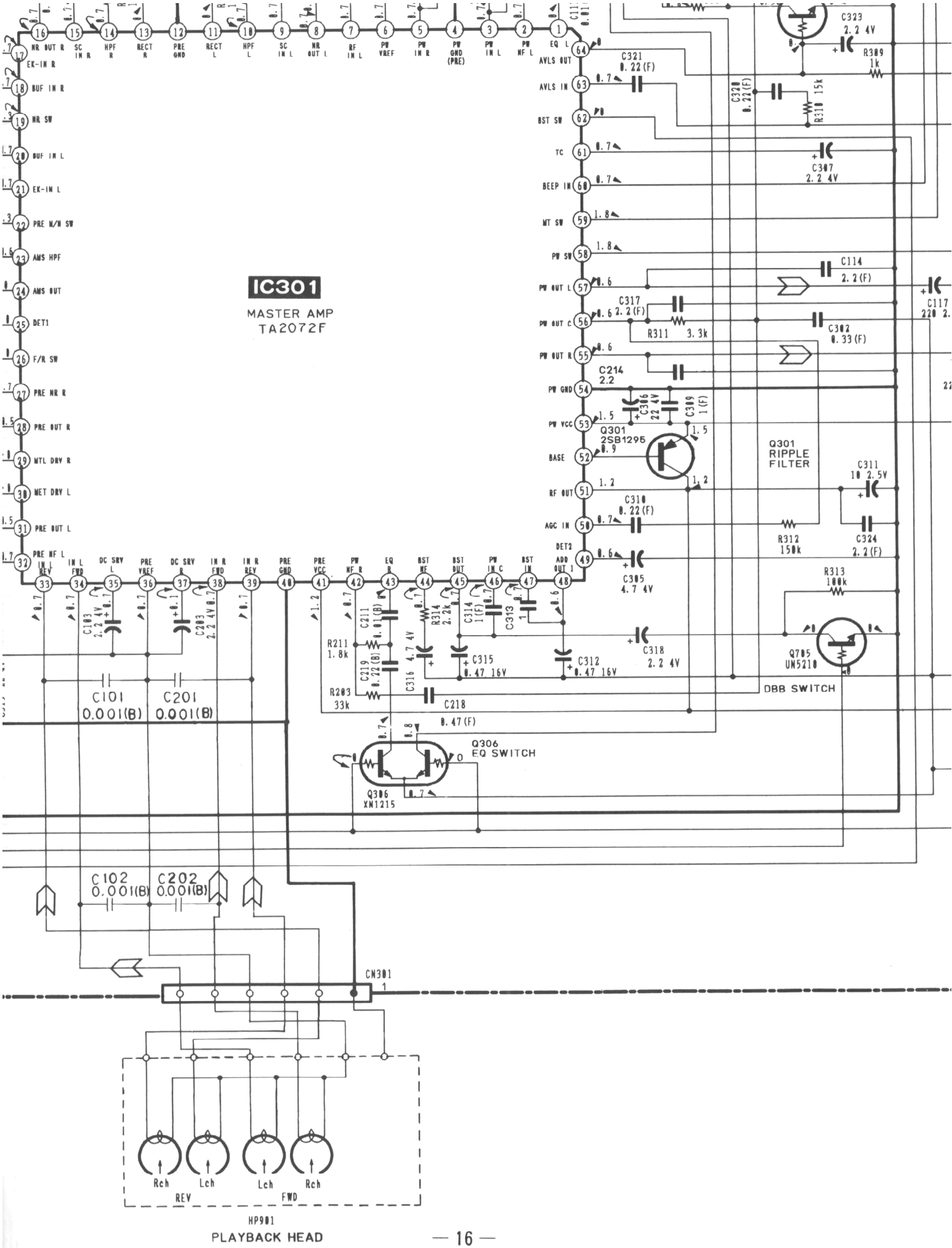
ss unless otherwise

- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Power voltage is dc 1.2V and fed with regulated dc power supply from external power voltage jack.
- Signal path.
  ▷ : PB

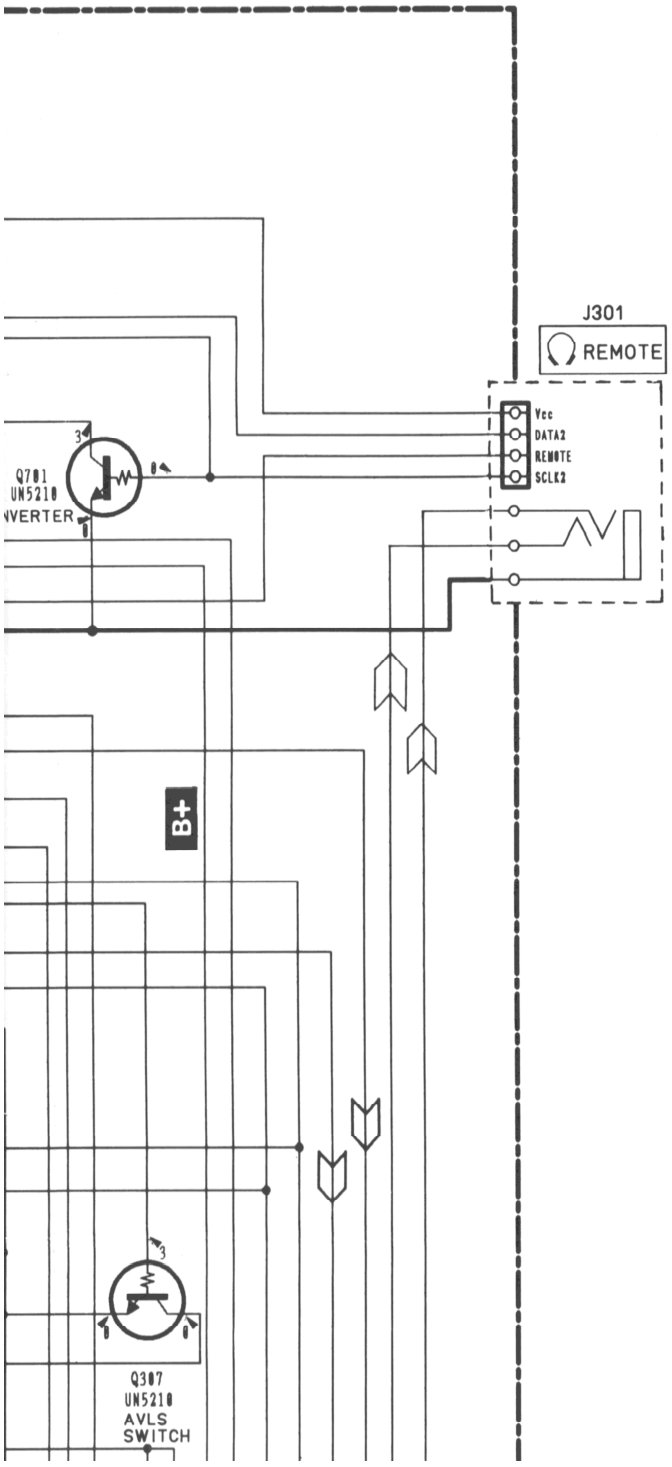

7
8
9
10
S301
NR
ON
OFF
S709
ATS SWITCH
ATS FLEXIBLE BOARD
DOLBY SWITCH FLEXIBLE BOARD
S706
REPEAT
S707
FF
S708
REW
S704
TAPE SW
R722
R723
1k 0.5%
R724
1.2K 0.5%
C703 1(F)
B+
IC705
XC61AS07XXMR
GND
IN
OUT
IC705
VOLTAGE DETECT
IC706
MM1276XWBE
ROUT1
Vcc
ROUT2
CE
TC
RIPPLE
GND
R711
220k
R716 330k
R721
22k 0.5%
R710 330k
R701 4.7k
TAPE SW
BEEP
SET STOP
NC
R208
33k
R207
33k
R305
43k
NR OUT
EK-IN R
BUF IN
NR SW
C207
C206
0.0015(B)
2.46Vp-p 2MHz

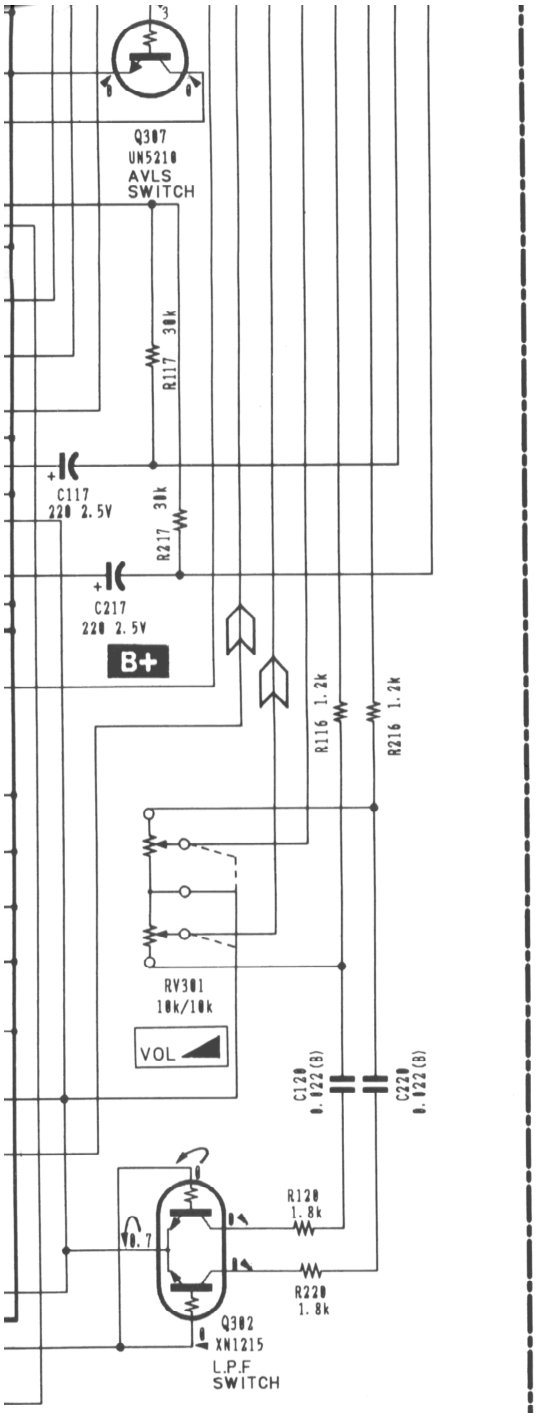

IC701
SYSTEM CONTROL
MB89131PFV
2.46Vp-p 2MHz
R710 330k
R701 4.7k
R719 220k
R718 220k
R705 100k
R702 47k
R703 47k
R704 47k
R706 100k
R709 220k
R707 100k
R725 22k
Q706
DETECTION
SWITCH
S703
A/B SW
R → STOP → N
S701 N/R SW
Q305
AMS CONTROL
Q305
UN5215
R301
R302
22k 0.5%
68k 0.5%
C301
0.22(B)
R304 2.2k
C308 1 6.3V
R305
43k
R207
33k
R208
33k
R107
33k
R108
33k
C115
1(F)
C215
1(F)
R205
6.8k
R206
150k
C204
0.022(B)
R214 1.8k
C205 0.033(B)
R213 2.2k
R204 180
R114
1.8k
C105
0.033(B)
R113
2.2k
R105
6.8k
C104
0.022(B)
R106 150k
R104 180
C319 22 4V


S702
BL . SKIP
ON
OFF
MODE
MODE SWITCH FLEXIBLE BOARD
IC703
REG
IC703 S-81211SG
GND
Vin
Vout
CC705 4.7 4V
R714 47k
R715 100k
Q702 XP1215 INVERTER
Q701 UN5210 INVERTER
R713 220k
C212 6.8 2.5V
C112 6.8 2.5V
C118 0.47 (F)
R103 33k
Q303 XN4404
Q303,304 AVLS
R306 100
R307 100
C119 0.22 (B)
R111 1.8k
C111 0.01 (B)
Q304 UN5215
C323 2.2 4V
R309 1k
C321 0.22 (F)
C320 0.22 (F)
R310 15k
C207 0.0082 (B)
C208 0.01 (B)
C209 0.33 (F)
C210 0.47 (B)
R218 390k
R219 12k
R215 1.1k
C110 0.47 (B)
C109 0.33 (F)
C108 0.01 (B)
R110 390k
R109 12k
R115 1.1k
C107 0.0082 (B)
C106 0.015 (B)
C303 4.7 4V
C304 22 4V
C213 2.2 4V
C216 0.01 (B)
C113 2.2 4V
C116 0.01 (B)
C206 0.015 (B)
16 NR OUT R
15 SC IN R
14 HPF R
13 RECT R
12 PRE GND
11 RECT L
10 HPF L
9 SC IN L
8 NR OUT L
7 RF IN L
6 PW VREF
5 PW IN R
4 PW GND (PRE)
3 PW IN L
2 PW NF L
1 EQ L
17 EX-IN R
18 BUF IN R
19 NR SW
64 AVLS OUT
63 AVLS IN
62 BST SW


IC301
MASTER AMP
TA2072F
Q301
2SB1295
Q301
RIPPLE
FILTER
Q705
UN5210
DBB SWITCH
Q306
EQ SWITCH
Q306
XN1215
C101
0.001(B)
C201
0.001(B)
C102
0.001(B)
C202
0.001(B)
CN301
HP901
PLAYBACK HEAD
Rch
Lch
Lch
Rch
REV
FWD

14 15


J301
REMOTE
Vcc
DATA2
REMOTE
SCLK2
Q701
UN5210
INVERTER
B+
Q307
UN5210
AVLS
SWITCH


Q307
UN5210
AVLS
SWITCH
R117 30k
C117
220 2.5V
R217 30k
C217
220 2.5V
B+
R116 1.2k
R216 1.2k
RV301
10k/10k
VOL
C120
0.022(B)
C220
0.022(B)
R120
1.8k
R220
1.8k
0.7
Q302
XN1215
L.P.F
SWITCH

6-3. IC PIN FUNCTIONS

• IC601 Motor Drive (LB1679V)

Pin No.	Pin Name	I/O	Function
1	VOUT	O	V phase output
2	UOUT	O	U phase output
3	USOFT	I	U phase software switching
4	VSOFT	I	V phase software switching
5	WSOFT	I	W phase software switching
6	VCC1	–	Power supply 1 (0.9V to 1.8V)
7	PL	O	PL driver output
8	VCC2	–	Power supply 2 (VCC1x2=1.8V to 3.6V)
9	HALL	O	HALL element bias output. When 2 mA:0.7V IO MAX=10 mA
10	MC	O	External TR drive IO MAX=20 mA
11	LED	O	LED1 driver output IO MAX=5 mA
12	VREF	I	Reference voltage 1.1V
13	CI1	I	Comparator input (Adjust rotation speed according to the external constant of C and R)
14	CI2	I	CI1 charge current in half-wave driving IO MAX=30 µA
15	PW	O	Comparator output
16	VC	O	Buffer output
17	IV	O	VI conversion output
18	VI	O	IV conversion output
19	CTRL2	I	Start, stop, and LED PL switching 3-value input (H, M, L) H: 1.7V to VCC2, M: Pin open (0.24V), L: 0 mV to 50 mV
20	CTRL1	I	Start, stop, and LED PL switching 3-value input (H, M, L) H: 1.7V to VCC2, M: Pin open (0.24V), L: 0 mV to 50 mV
21	PSUB	O	MCENTER and U phase output comparator output
22	PSIG	O	PSIG output
23	COM	I	PSIG section motor middle point voltage input
24	GND	–	GND
25	IE	I	Adjusts software switching pin current with external resistor
26	WIN	I	W phase input
27	VIN	I	V phase input
28	UIN	I	U phase input
29	WOUT	O	W phase output
30	PGND	–	POWER block GND

• **IC701 System Controller (MB8913PFV)**

Pin No.	Pin Name	I/O	Function
1	AVCC	–	Analog section power supply
2	RST	I	Reset
3	MODE0	I	Operation mode specified input (Connected to GND)
4	MODE1	I	Operation mode specified input (Connected to GND)
5	X0	–	High speed clock connection (2 MHz ceramics oscillator)
6	NC	–	Not used
7	NC	–	Not used
8	X1	–	High speed clock connection (2 MHz ceramics oscillator)
9	VCC	–	Logic section power supply
10	XDA	–	Low speed clock connection (Not used)
11	NC	–	Not used
12	NC	–	Not used
13	X1A	–	Low speed clock connection (Not used)
14	DDC CLK CTL	O	DDC oscillation frequency change output (L:Waiting state)
15	AVLS CTL	O	AVLS control output (AVLS:L)
16	VOCAL UP	O	Sound quality control output (VOCAL UP:H)
17	NC	–	Not used
18	DBB 1 CTL	O	Sound quality control output (DBB1:H)
19	DBB ON/OFF	O	Sound quality control output (DBB1, DBB2:H)
20	F/R CTL	O	FWD:H, REV:L
21	NC	–	Not used
22	AMS CTL	O	AMS sensitivity control output (FF/REW:H)
23	MUTE CTL	O	AUDIO POWER AMP MUTING (MUTE:L)
24	MOTOR-U	O	Motor U phase control output
25	VSS	–	GND
26	MOTOR-V	O	Motor V phase control output
27	MOTOR-W	O	Motor W phase control output
28	NC	–	Not used
29	SET STOP	–	Not used (Connected to GND)
30	PHOTO IN	I	Rotation detection input
31	A/B SW	I	Tape A/B side detection SW input (Side A top:L, Side B top:H)
32	NC	–	Not used
33	AMS IN	I	Recording detection input (Music:H)
34	DIR MODE	I	DIRECTION MODE selection and BL, SKIP ON/OFF input SHUT OFF, BL SKIP OFF = L, ENDLESS, BL SKIP ON = H
35	R POWER	–	Not used (Connected to GND)
36	CTL2	O	Servo IC control output
37	CTL1	O	Servo IC control output
38	NC	–	Not used
39	NC	–	Not used

Pin No.	Pin Name	I/O	Function
40	BATT1	I	LEVEL1 : BATT1 = H, BATT2 = H (LOW) LEVEL2 : BATT1 = H, BATT2 = L (MIDDLE) LEVEL3 : BATT1 = L, BATT2 = L (HIGH)
41	BATT2	I	
42	RMUM	I	Remote control detection (Present:H, Absent:L)
43	TC/CF	–	Not used (Connected to GND)
44	NC	–	Not used
45	NC	–	Not used
46	SET STOP	I	For power failure STOP
47	BEEP	O	Beep sound output
48	TAPE SW	I	Tape presence detection input (Present:L)
49	NC	–	Not used
50	WAKE UP	I	Stop mode release interruption
51	P-SIGNAL	I	Motor rotation control
52	AMS 2	–	Not used
53	CE CTL	–	Not used
54	DATA1	O	Serial data output
55	SCLK1	O	Serial clock input
56	NC	–	Not used
57	AVSS	–	Analog section (GND)
58	NC	–	Not used
59	AVR	–	Analog section reference potential input
60	RQT	–	Not used
61	FWD/REV SW	I	F/R SW input (Analog input)
62	REMOTE IN	I	Key input (Analog input)
63	MOTOR START	O	Motor start-up control output (Motor start-up:Outputs L for 200 ms)
64	NC	–	Not used

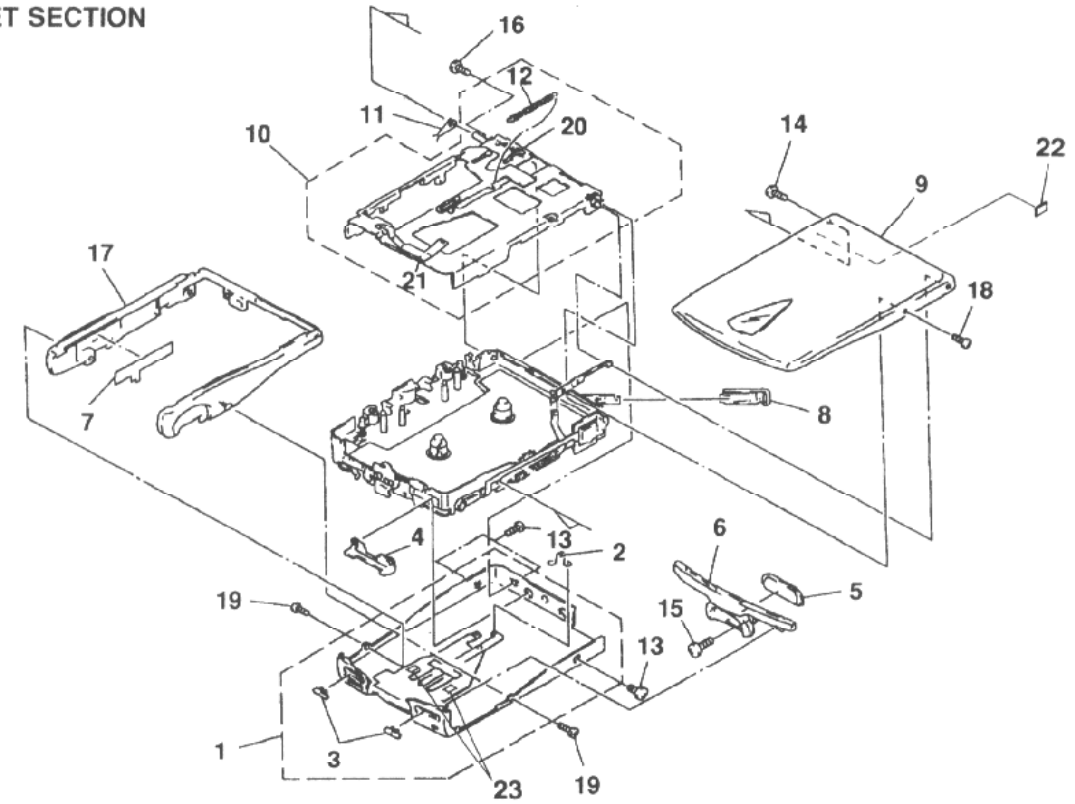
SECTION 7
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

↑ Parts color ↑ Cabinet's color

- Color Indication of Appearance Parts Example: KNPB, BALANCE (WHITE). . . (RED)
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  JE : Tourist model

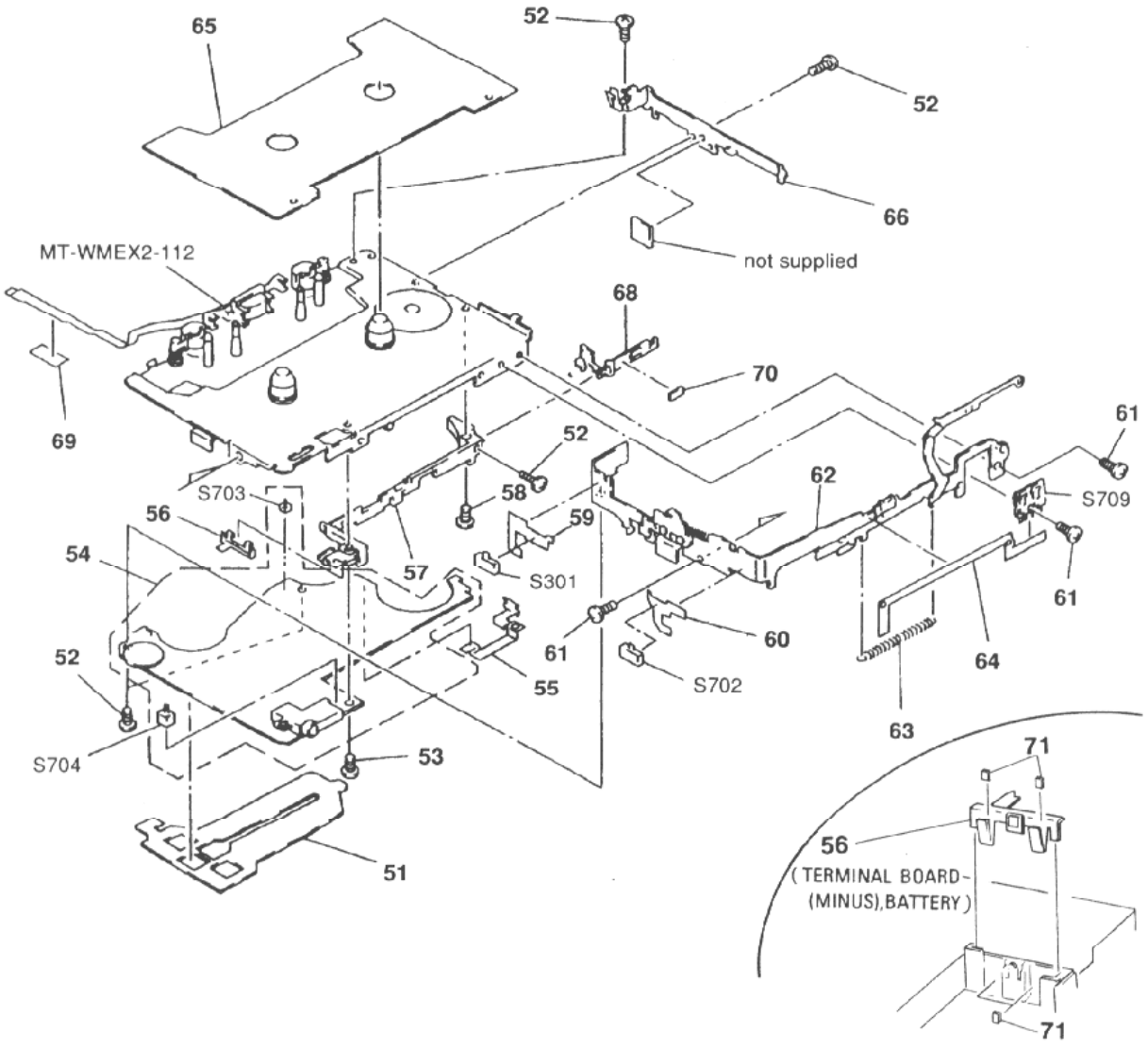
7-1. CABINET SECTION



REF. No.	Part No.	Description	Remark
1	X-3370-983-1	CASE ASSY (B)(BLACK)(EX2)	
1	X-3370-987-1	CASE ASSY (L)(BLUE)(EX2:JE)	
1	X-3370-989-1	CASE ASSY (G)(GREEN)(EX2:JE)	
1	X-3370-994-1	CASE ASSY (S)(SILVER)(EX2:JE)	
1	X-3371-387-1	CASE ASSY (HG)(EX2HG/EX2HGX)	
2	3-916-288-01	SPRING (HOLD)	
3	3-928-999-01	KNOB (DOLBY) (BLACK)	
3	3-928-999-11	KNOB (DOLBY)(EX2:JE) (BLUE)	
3	3-928-999-21	KNOB (DOLBY)(EX2:JE) (GREEN)	
3	3-928-999-31	KNOB (DOLBY)(EX2:JE) (SILVER)	
4	3-928-991-01	PLATE (TERMINAL), ORNAMENTAL	
5	3-928-984-01	BUTTON (OPEN)(EX2)	
5	3-928-984-11	BUTTON (OPEN)(EX2HG/EX2HGX)	
6	3-928-979-01	ORNAMENT (A-EX), REEL (EX2)	
6	3-928-979-11	ORNAMENT (A-EX), REEL (EX2HG/EX2HGX)	
* 7	3-918-043-01	PAPER (H), SHIELD	
8	3-928-987-01	LID, BATTERY CASE (BLACK)(EX2)	
8	3-928-987-11	LID, BATTERY CASE (BLUE)(EX2:JE)	
8	3-928-987-21	LID, BATTERY CASE (GREEN)(EX2:JE)	
8	3-928-987-31	LID, BATTERY CASE (SILVER)(EX2:JE)	
8	3-928-987-41	LID, BATTERY CASE (EX2HG/EX2HGX)	
9	X-3370-982-1	LID ASSY (B), CASSETTE (BLACK)(EX2)	
9	X-3370-991-1	LID ASSY (L), CASSETTE (BLUE)(EX2:JE)	
9	X-3370-992-1	LID ASSY (G), CASSETTE (GREEN)(EX2:JE)	
9	X-3370-993-1	LID ASSY (S), CASSETTE (SILVER)(EX2:JE)	

REF. No.	Part No.	Description	Remark
9	X-3371-386-1	LID ASSY (HG), CASSETTE (EX2HG)	
9	X-3371-541-1	LID ASSY (HGX), CASSETTE (EX2HGX)	
* 10	X-3370-980-1	HOLDER ASSY	
11	3-916-245-01	SPRING (LOCK LEVER)	
12	3-916-246-01	SPRING, TENSION	
13	3-704-197-21	SCREW (M1.4X2.5), LOCKING (SILVER,GREEN) (EX2:JE/EX2HG/EX2HGX)	
13	3-704-197-23	SCREW (M1.4X2.5), LOCKING (BLACK,BLUE) (EX2)	
14	3-907-009-01	SCREW (M1.4) (SILVER,GREEN) (EX2:JE/EX2HG/EX2HGX)	
14	3-907-009-11	SCREW (M1.4)(BLACK,BLUE) (EX2)	
15	3 704 197 13	SCREW (M1.4X2.0), LOCKING (EX2)	
16	3-365-630-41	SCREW (M1.4)	
17	3-928-985-01	ORNAMENT (B), REEL (BLACK,BLUE)	
17	3-928-985-11	ORNAMENT (B), REEL (GREEN)(EX2:JE)	
17	3-928-985-21	ORNAMENT (B), REEL (SILVER)(EX2:JE)	
18	3-704-197-01	SCREW (M1.4X1.6), LOCKING (SILVER,GREEN) (EX2:JE/EX2HG/EX2HGX)	
18	3-704-197-03	SCREW (M1.4X1.6), LOCKING (BLACK,BLUE) (EX2)	
19	3-704-197-51	SCREW (M1.4X3.5), LOCKING (SILVER,GREEN) (EX2:JE/EX2HG/EX2HGX)	
19	3-704-197-53	SCREW (M1.4X3.5), LOCKING (BLACK,BLUE) (EX2)	
20	3-916-260-01	SPRING (A), HOLDER	
21	3-928-988-01	SPRING (B), HOLDER	
22	3-353-139-41	SHEET(SW)	
* 23	3-315-076-11	SPACER,BRAKE	

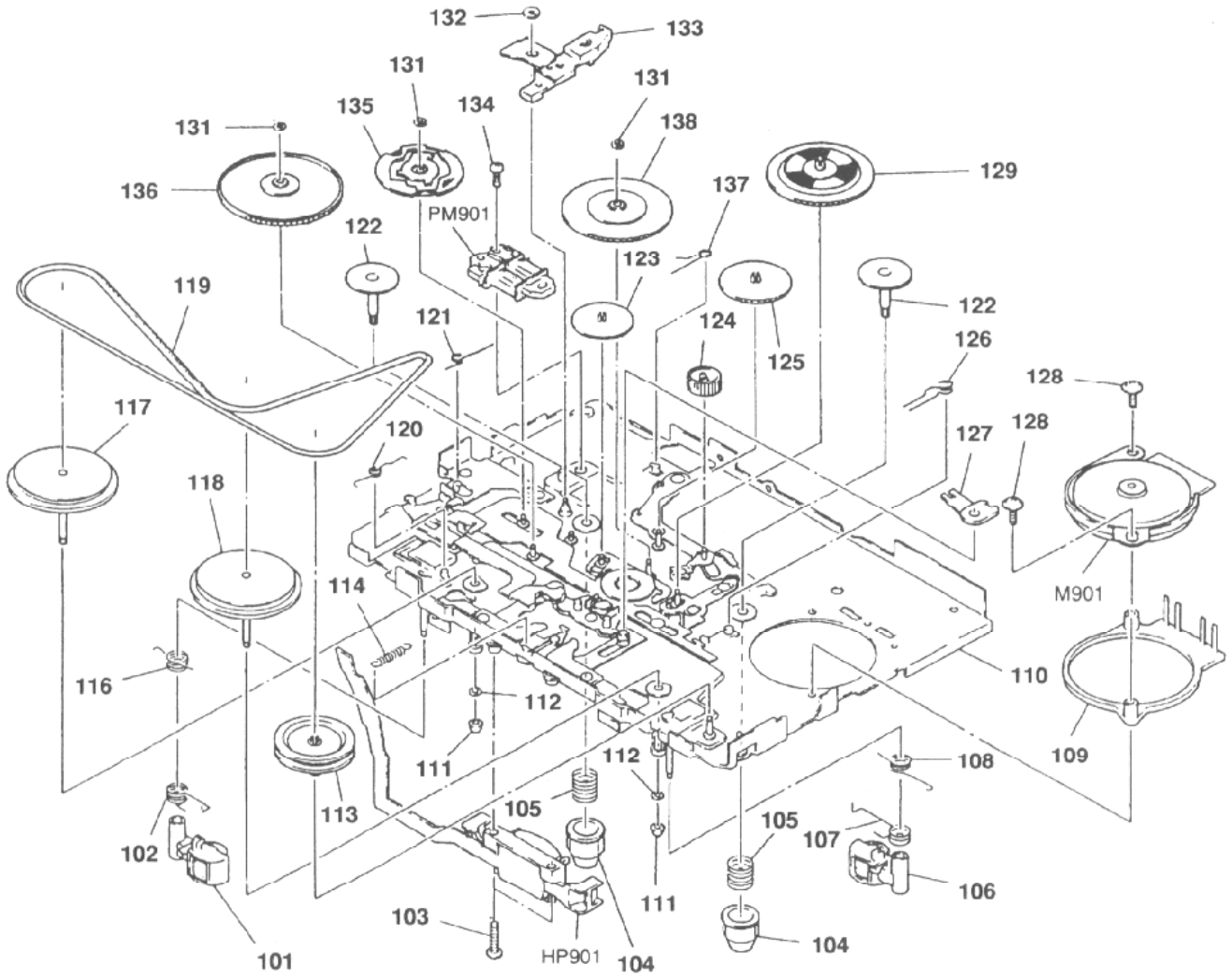
7-2. AUDIO BOARD SECTION



REF. No.	Part No.	Description	Remark
51	3-929-271-01	SPACER (SW)	
52	3-704-197-01	SCREW (M1.4X1.6), LOCKING	
53	3 366 746 61	SCREW (M1.4X5.5)	
* 54	A-3016-746-A	AUDIO BOARD, COMPLETE	
55	3-916-248-01	TERMINAL BOARD	
56	3-912-020-01	TERMINAL BOARD (MINUS),BATTERY	
* 57	3-916-252-01	HOLDER, BATTERY	
58	3-704-197-61	SCREW (M1.4X4.0), LOCKING	
59	1-658-808-11	DOLBY SWITCH FLEXIBLE BOARD	
60	1-658-807-11	MODE SWITCH FLEXIBLE BOARD	
61	3-366-892-01	SCREW (M1.4)	
62	X-3370-981-1	BRACKET (A) ASSY	

REF. No.	Part No.	Description	Remark
63	3-916-241-01	SPRING, TENSION	
64	1-653-415-11	ATS FLEXIBLE BOARD	
65	3-916-250-01	COVER, MD	
66	X-3370-795-1	BRACKET (B) ASSY	
68	X-3368-789-2	TERMINAL BOARD ASSY, BATTERY	
69	3-831-441-XX	SPACER, KNOB	
70	9-911-838-XX	CUSHION	
71	3-925-743-11	CUSHION	
S301	1-572-922-11	SWITCH, SLIDE (□□ NR)	
S702	1-572-922-11	SWITCH, SLIDE (BL SKIP)	
S703	1-762-516-11	SWITCH, PUSH (A/B)	
S704	1-692-849-21	SWITCH, PUSH (1 KEY)(TAPE)	
S709	1-572-580-11	SWITCH, LEAF (ATS)	

7-3. MECHANISM SECTION (MT-WMEX2-112)



REF. No.	Part No.	Description	Remark
101	X-3368-776-1	PINCH LEVER (N) ASSY	
102	3-916-341-01	SPRING (PINCH N)	
103	3-704-413-31	SCREW (M1.4X7.2)	
104	3-916-357-01	GEAR (REEL)	
105	3-366-058-01	SPRING, COMPRESSION	
106	X-3368-777-1	PINCH LEVER (R) ASSY	
107	3-916-342-01	SPRING (PINCH R)	
108	3-916-344-01	SPRING (RETURN R)	
* 109	3-916-337-01	DECK, FIXED, TERMINAL	
110	X-3370-970-1	CHASSIS ASSY	
111	3-366-017-01	BUSHING (CAPSTAN)	
112	3-918-943-01	WASHER, STOPPER	
113	3-916-350-01	PULLEY (REVERSE)	
114	3-916-346-01	SPRING, TENSION	
116	3-916-343-01	SPRING (RETURN N)	
117	X-3370-949-1	WHEEL (N) ASSY, CAPSTAN	
118	X-3370-950-1	WHEEL (R) ASSY, CAPSTAN	
119	3-924-422-01	BELT	
120	3-916-345-02	SPRING (LOCK LEVER)	

REF. No.	Part No.	Description	Remark
121	3-916-340-01	SPRING (EJECT), TORSION	
122	3-365-801-01	TABLE, REEL	
123	3-916-353-01	GEAR (A)	
124	3-916-352-01	GEAR (FR)	
125	3-916-354-01	GEAR (B)	
126	3-916-347-01	SPRING (NR), TORSION	
127	3-916-339-01	LEVER (NR SW)	
128	3-358-455-11	SCREW, PRECISION WASHER HEAD	
129	A-3042-517-A	GEAR (C) BLOCK ASSY	
131	3-338-645-31	WASHER (0.8-2.5)	
132	3-348-953-41	WASHER	
133	3-916-338-01	LEVER (TRIGGER)	
134	3-366-521-51	SCREW (M1.4X3.5)	
135	3-916-356-01	GEAR (CAM)	
136	3-916-351-01	GEAR (K)	
137	3-916-348-01	SPRING (TRIGGER), TORSION	
138	X-3368-780-1	CLUTCH ASSY	
HP901	1-500-275-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-698-368-11	MOTOR (REEL/CAPSTAN)	
PM901	1-454-674-11	SOLENOID, PLUNGER	

SECTION 8
ELECTRICAL PARTS LIST

ATS FLEXIBLE **AUDIO**

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μ A..., uPA...: μ PA..., uPB...: μ PB..., uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
  uF : μ F
- COILS
  uH : μ H
- Abbreviation
  JE : Tourist model

REF. No.	Part No.	Description			Remark
	1-653-415-11	ATS FLEXIBLE BOARD **********			
		< SWITCH >			
S709	1-572-580-11	SWITCH, LEAF (ATS)			
**********					
	A-3016-746-A	AUDIO BOARD, COMPLETE **********			
		< CAPACITOR >			
C101	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C102	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C103	1-135-187-21	TANTAL. CHIP	2.2uF	20%	4V
C104	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C105	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C106	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C107	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C108	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C109	1-165-112-11	CERAMIC CHIP	0.33uF	16V	
C110	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C111	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C112	1-109-937-11	TANTAL. CHIP	6.8uF	20%	2.5V
C113	1-135-187-21	TANTAL. CHIP	2.2uF	20%	4V
C114	1-109-994-11	CERAMIC CHIP	2.2uF	10%	10V
C115	1-164-346-11	CERAMIC CHIP	1uF	16V	
C116	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C117	1-109-930-11	TANTAL. CHIP	220uF	20%	2.5V
C118	1-164-005-11	CERAMIC CHIP	0.47uF	25V	
C119	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C120	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C201	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C202	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C203	1-135-187-21	TANTAL. CHIP	2.2uF	20%	4V
C204	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C205	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C206	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C207	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C209	1-165-112-11	CERAMIC CHIP	0.33uF	16V	
C210	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C211	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C212	1-109-937-11	TANTAL. CHIP	6.8uF	20%	2.5V
C213	1-135-187-21	TANTAL. CHIP	2.2uF	20%	4V
C214	1-109-994-11	CERAMIC CHIP	2.2uF	10%	10V
C215	1-164-346-11	CERAMIC CHIP	1uF	16V	
C216	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C217	1-109-930-11	TANTAL. CHIP	220uF	20%	2.5V
C218	1-164-005-11	CERAMIC CHIP	0.47uF	25V	
C219	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C220	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C301	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C302	1-165-112-11	CERAMIC CHIP	0.33uF	16V	
C303	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C304	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C305	1-109-934-11	TANTAL. CHIP	4.7uF	20%	4V
C306	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C307	1-135-187-21	TANTAL. CHIP	2.2uF	20%	4V
C308	1-135-337-11	TANTAL. CHIP	1uF	20%	6.3V
C309	1-164-346-11	CERAMIC CHIP	1uF	16V	
C310	1-165-128-11	CERAMIC CHIP	0.22uF	16V	
C311	1-107-983-11	TANTAL. CHIP	10uF	20%	2.5V
C312	1-109-847-11	TANTAL. CHIP	0.47uF	20%	16V
C313	1-164-346-11	CERAMIC CHIP	1uF	16V	
C314	1-164-346-11	CERAMIC CHIP	1uF	16V	
C315	1-109-847-11	TANTAL. CHIP	0.47uF	20%	16V
C316	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C317	1-109-994-11	CERAMIC CHIP	2.2uF	10%	10V
C318	1-107-815-11	TANTAL. CHIP	2.2uF	20%	4V
C319	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C320	1-165-128-11	CERAMIC CHIP	0.22uF	16V	
C321	1-165-128-11	CERAMIC CHIP	0.22uF	16V	
C323	1-107-815-11	TANTAL. CHIP	2.2uF	20%	4V
C324	1-164-505-11	CERAMIC CHIP	2.2uF	16V	
C601	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C602	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C603	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C604	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C605	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C607	1-109-936-11	TANTAL. CHIP	3.3uF	20%	2.5V
C608	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C703	1-109-996-11	CERAMIC CHIP	1uF	6.3V	
C704	1-164-346-11	CERAMIC CHIP	1uF	16V	
C705	1-109-934-11	TANTAL. CHIP	4.7uF	20%	4V
C801	1-109-935-11	TANTAL. CHIP	4.7uF	20%	6.3V
C802	1-109-935-11	TANTAL. CHIP	4.7uF	20%	6.3V
C804	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C805	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C806	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C808	1-109-935-11	TANTAL. CHIP	4.7uF	20%	6.3V
C809	1-109-934-11	TANTAL. CHIP	4.7uF	20%	4V
C810	1-109-934-11	TANTAL. CHIP	4.7uF	20%	4V
		< CONNECTOR >			
CN301	1-573-346-21	CONNECTOR, FFC/FPC 6P			

AUDIO

REF. No.	Part No.	Description	Remark
		< DIODE >	
D601	8-719-989-53	DIODE CL-200HR-C-TSL	
D602	8-719-404-46	DIODE MA110	
		< IC >	
IC301	8-759-271-27	IC TA2072F	
IC601	8-759-271-28	IC LB1679V-TLM	
IC701	8-759-296-06	IC MB89131PFV-G-213-BND	
IC702	8-759-163-52	IC XC61AN1402MX	
IC703	8-759-280-84	IC S-81211SG-QA	
IC705	8-749-011-98	IC XC61AS07XXMR	
IC706	8-759-291-99	IC MM1276XWBE	
IC801	8-759-336-33	IC MPC1850SVMEL	
		<JACK>	
J301	1-766-512-21	JACK 7P (∩ REMOTE)	
		< COIL >	
L801	1-412-006-31	INDUCTOR CHIP 10uH	
L802	1-412-006-31	INDUCTOR CHIP 10uH	
		< PHOTO INTERUPTER >	
PH701	8-719-988-15	PHTO REFLECTOR PR-11-C	
		< TRANSISTOR >	
Q301	8-729-807-87	TRANSISTOR 2SB1295-UL6	
Q302	8-729-403-17	TRANSISTOR XN1215	
Q303	8-729-422-39	TRANSISTOR XN4404	
Q304	8-729-420-50	TRANSISTOR UN5215	
Q305	8-729-420-50	TRANSISTOR UN5215	
Q306	8-729-403-17	TRANSISTOR XN1215	
Q307	8-729-421-77	TRANSISTOR UN5210-R-TX	
Q601	8-729-809-46	TRANSISTOR 2SD1935-CT6	
Q602	8-729-822-60	TRANSISTOR 2SB1302-S	
Q604	8-729-420-24	TRANSISTOR 2SB1218A-QRS	
Q701	8-729-421-77	TRANSISTOR UN5210-R-TX	
Q702	8-729-426-36	TRANSISTOR XP1215-TXE	
Q705	8-729-421-77	TRANSISTOR UN5210-R-TX	
Q706	8-729-422-54	TRANSISTOR XN4215	
		< RESISTOR >	
R103	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R104	1-216-812-11	METAL CHIP 180 5% 1/16W	
R105	1-216-831-11	METAL CHIP 6.8K 5% 1/16W	
R106	1-216-847-11	METAL CHIP 150K 5% 1/16W	
R107	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R108	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R109	1-216-834-11	METAL CHIP 12K 5% 1/16W	
R110	1-216-852-11	METAL CHIP 390K 5% 1/16W	
R111	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
R113	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R114	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
R115	1-218-270-11	METAL GLAZE 1.1K 5% 1/16W	
R116	1-216-822-11	METAL CHIP 1.2K 5% 1/16W	
R117	1-218-294-11	METAL GLAZE 30K 5% 1/16W	
R120	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
R203	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R204	1-216-812-11	METAL CHIP 180 5% 1/16W	
R205	1-216-831-11	METAL CHIP 6.8K 5% 1/16W	
R206	1-216-847-11	METAL CHIP 150K 5% 1/16W	
R207	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R208	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R209	1-216-834-11	METAL CHIP 12K 5% 1/16W	
R210	1-216-852-11	METAL CHIP 390K 5% 1/16W	
R211	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
R213	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R214	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
R215	1-218-270-11	METAL GLAZE 1.1K 5% 1/16W	
R216	1-216-822-11	METAL CHIP 1.2K 5% 1/16W	
R217	1-218-294-11	METAL GLAZE 30K 5% 1/16W	
R220	1-216-824-11	METAL CHIP 1.8K 5% 1/16W	
R301	1-218-736-11	METAL CHIP 68K 0.50% 1/16W	
R302	1-218-724-11	METAL CHIP 22K 0.50% 1/16W	
R304	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R305	1-218-295-11	METAL GLAZE 43K 5% 1/16W	
R306	1-216-809-11	METAL CHIP 100 5% 1/16W	
R307	1-216-809-11	METAL CHIP 100 5% 1/16W	
R309	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R310	1-216-835-11	METAL CHIP 15K 5% 1/16W	
R311	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
R312	1-216-847-11	METAL CHIP 150K 5% 1/16W	
R313	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R314	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R601	1-216-815-11	METAL CHIP 330 5% 1/16W	
R602	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R603	1-216-856-11	METAL CHIP 820K 5% 1/16W	
R604	1-216-857-11	METAL CHIP 1M 5% 1/16W	
R605	1-216-837-11	METAL CHIP 22K 5% 1/16W	
R606	1-216-857-11	METAL CHIP 1M 5% 1/16W	
R607	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R608	1-216-837-11	METAL CHIP 22K 5% 1/16W	
R609	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R610	1-216-849-11	METAL CHIP 220K 5% 1/16W	
R615	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R616	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R617	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R618	1-216-857-11	METAL CHIP 1M 5% 1/16W	
R619	1-216-853-11	METAL CHIP 470K 5% 1/16W	
R701	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	

AUDIO | DOLBY SWITCH FLEXIBLE | MODE SWITCH FLEXIBLE

REF. No.	Part No.	Description				Remark
R702	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R703	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R704	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R705	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R706	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R707	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R708	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R709	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R710	1-216-851-11	METAL CHIP	330K	5%	1/16W	
R711	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R712	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R713	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R714	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R715	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R716	1-216-851-11	METAL CHIP	330K	5%	1/16W	
R718	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R719	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R720	1-218-724-11	METAL CHIP	22K	0.50%	1/16W	
R721	1-218-836-11	METAL CHIP	360	0.50%	1/16W	
R722	1-218-845-11	METAL CHIP	820	0.50%	1/16W	
R723	1-218-692-11	METAL CHIP	1K	0.50%	1/16W	
R724	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W	
R725	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R726	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R727	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R801	1-216-859-11	METAL GLAZE	1.5M	5%	1/16W	
		< VARIABLE RESISTOR >				
RV301	1-223-711-21	RES, VAR, CARBON 10K/10K (VOL ◢)				
RV601	1-223-715-21	RES, ADJ 220K				
		< SWITCH >				
S701	1-572-581-11	SWITCH, SLIDE (N/R)				
S703	1-762-516-11	SWITCH, PUSH (A/B)				
S704	1-692-849-21	SWITCH, PUSH (1 KEY)(TAPE)				
S705	1-692-453-11	SWITCH, KEY BOARD (□)				
S706	1-692-453-11	SWITCH, KEY BOARD (◁◁▷ REPEAT)				
S707	1-692-453-11	SWITCH, KEY BOARD (FF)				
S708	1-692-453-11	SWITCH, KEY BOARD (REW)				
		< VIBRATOR >				
X701	1-579-867-21	VIBRATOR, CERAMIC (2MHz)				
**********						
	1-658-808-11	DOLBY SWITCH FLEXIBLE BOARD **********				
		< SWITCH >				
S301	1-572-922-11	SWITCH, SLIDE (□□ NR)				

REF. No.	Part No.	Description	Remark
**********			
	1-658-807-11	MODE SWITCH FLEXIBLE BOARD **********	
		< SWITCH >	
S702	1-572-922-11	SWITCH, SLIDE (BL SKIP/MODE)	
**********			
		MISCELLANEOUS **********	
HP901	1-500-275-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-698-368-11	MOTOR (REEL/CAPSTAN)	
PM901	1-454-674-11	SOLENOID, PLUNGER	
S301	1-572-922-11	SWITCH, SLIDE (□□ NR)	
S702	1-572-922-11	SWITCH, SLIDE (BL SKIP)	
S703	1-762-516-11	SWITCH, PUSH (A/B)	
S704	1-692-849-21	SWITCH, PUSH (1 KEY)(TAPE)	
S709	1-572-580-11	SWITCH, LEAF (ATS)	
**********			
		ACCESSORIES & PACKING MATERIALS **********	
	1-473-394-11	REMOTE CONTRAL UNIT (RM-WM79E)	
⚠	1-528-252-11	BATTERY CHARGER (BC-7S)(EX2HG:UK)	
	1-528-539-11	BATTERY CASE	
	1-528-543-22	BATTERY,NICKEL CADMIUM(NC-6WM)(EX2HG)	
⚠	1-528-546-11	BATTERY CHARGER (BC-7SY)(EX2HG:AEP	
	1-528-551-11	BATTERY, NICKEL HYDROGEN (EX2/EX2HGX)	
	1-528-590-11	BATTERY, NICKEL HYDROGEN (EX2/EX2HGX)	
⚠	1-569-007-11	ADAPTER, CONVERSION 2P (EX2/EX2HGX)	
	3-800-973-11	MANUAL, INSTRUCTION (CHINES, SPANISH, ENGLISH)(AEP, UK, E)	
	3-800-973-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH)(AEP)	
	3-800-973-31	MANUAL, INSTRUCTION (FRENCH, ITALIAN, PORTUGUESE)(AEP)	
	3-800-973-41	MANUAL, INSTRUCTION (JAPANESE, ENGLISH)(JE)	
	3-800-973-51	MANUAL, INSTRUCTION (KOREAN)(E)	
*	3-928-107-01	INDIVIDUAL CARTON (EX2HGX)	
*	3-928-133-01	INDIVIDUAL CARTON (EX2HG)	
*	3-928-134-01	INDIVIDUAL CARTON (EX2:E)	
	3-929-799-01	CASE, CARRYING (EX2:E/EX2HG/EX2HGX)	
	3-929-799-01	CASE, CARRYING (EX2:JE)	
	8-953-537-90	HEADPHONE MDR-E741MP//K SET	
	X-3329-657-1	ATTACHMENT	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.